



NowTechnologies has been founded to undertake the development, design, marketing, manufacture and support of the **GyroSet™** solution.



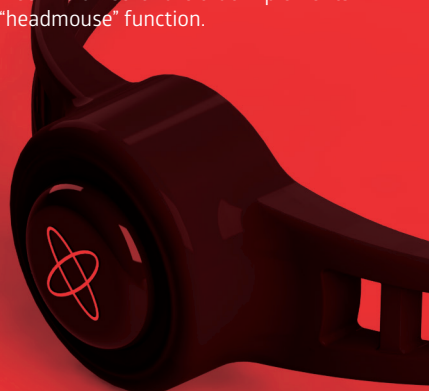
Paralysis can be a life-changing condition, especially if the injury prohibits the person from going about their daily routine or job as maybe they previously did. Our goal is to provide these people with an affordable solution that can make them independent and enable them to live their lives with mobility and through providing a way to interact with computers again, providing them with the potential to work, create and communicate.

Our solution has been developed with the active participation of injured and disabled users whose requirements and feedback was invaluable in bringing Gyroset™ to completion.

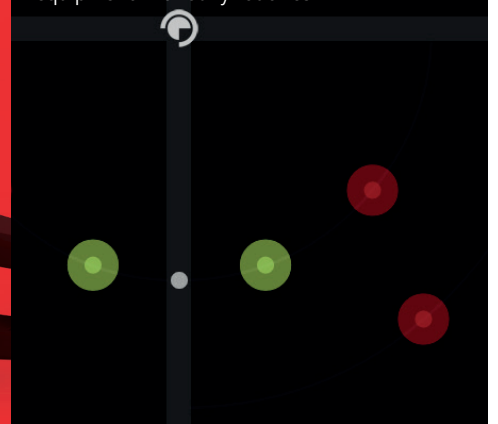
GyroSet™ Guide is our electronic platform that integrates a reliable motor-driver circuitry with power management, environmental control and wireless computer access for wheelchair users. With the aim of easy personalization of control methods, a set of compatible controllers are available, such as touchpad, optical force joystick and our GyroSet™ Glory headset.

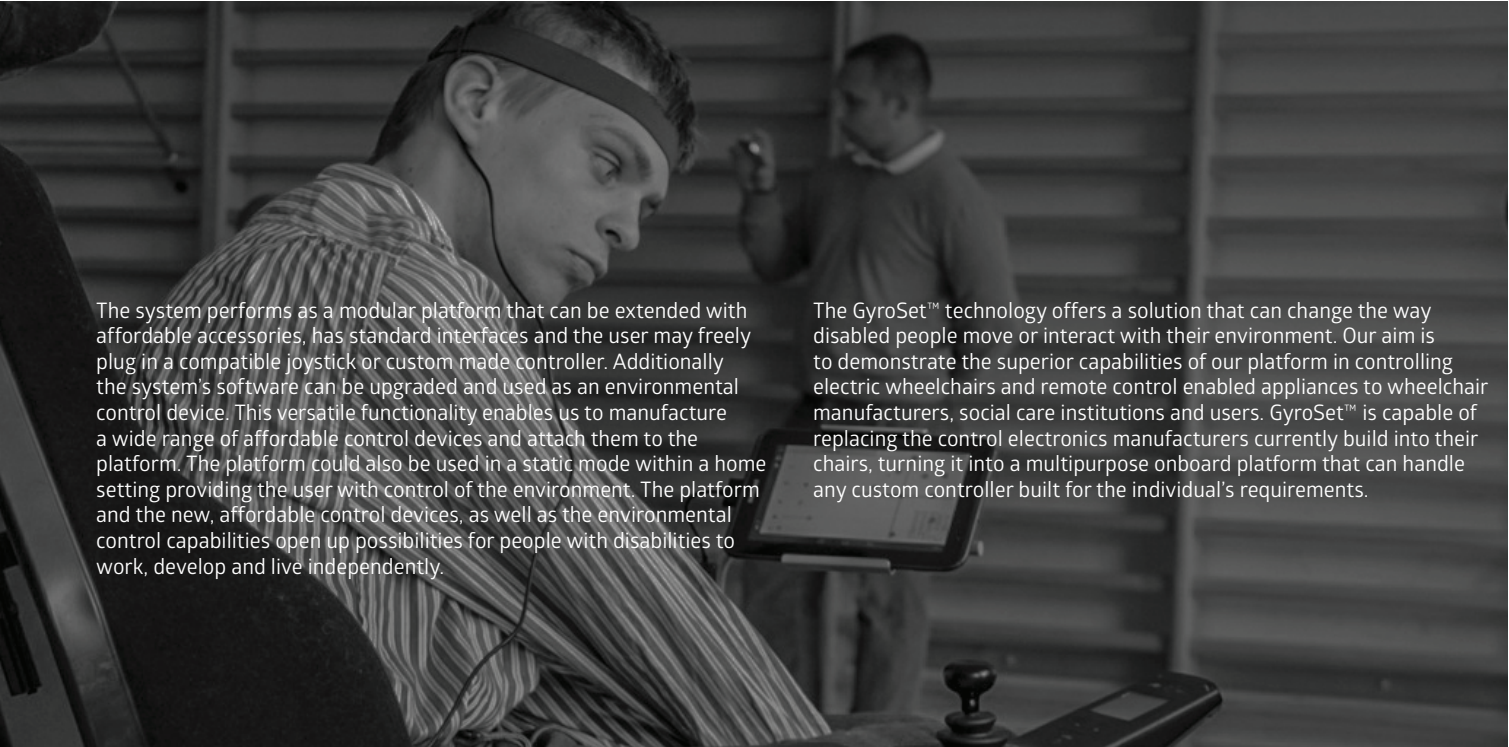


Gyroset™ Glory is a specialized headset that constantly measures the spatial position of the users head. It enables tetraplegics to control their wheelchair with head movements in an intuitive manner. Gyroset™ Glory can connect wirelessly to any computer, tablet or smartphone so we also developed the WheelDroid™ software that implements a "headmouse" function.



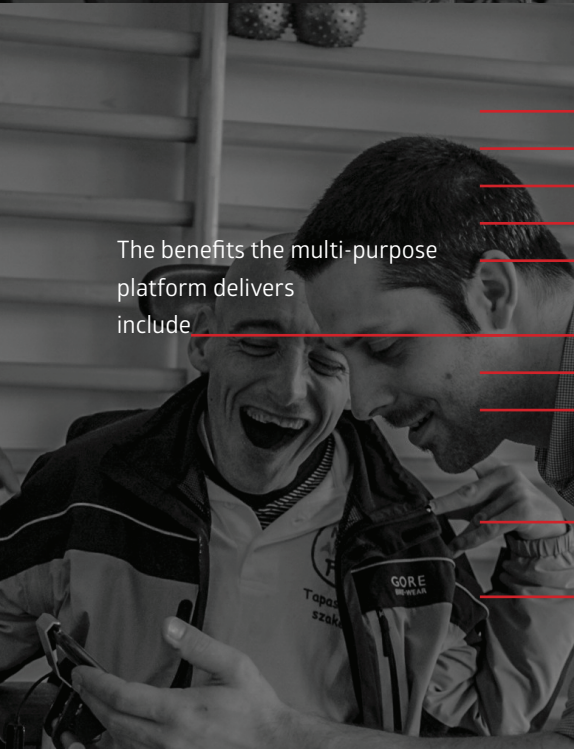
WheelDroid™ is an android application that allows the user to change and monitor the parameters of their electric wheelchair, including control features, motion dynamics, power management and environmental control. From the time of installation users will be able to easily adapt the behaviour of their chair to suit their driving needs and synchronize their equipment with daily routines.





The system performs as a modular platform that can be extended with affordable accessories, has standard interfaces and the user may freely plug in a compatible joystick or custom made controller. Additionally the system's software can be upgraded and used as an environmental control device. This versatile functionality enables us to manufacture a wide range of affordable control devices and attach them to the platform. The platform could also be used in a static mode within a home setting providing the user with control of the environment. The platform and the new, affordable control devices, as well as the environmental control capabilities open up possibilities for people with disabilities to work, develop and live independently.

The GyroSet™ technology offers a solution that can change the way disabled people move or interact with their environment. Our aim is to demonstrate the superior capabilities of our platform in controlling electric wheelchairs and remote control enabled appliances to wheelchair manufacturers, social care institutions and users. GyroSet™ is capable of replacing the control electronics manufacturers currently build into their chairs, turning it into a multipurpose onboard platform that can handle any custom controller built for the individual's requirements.



The benefits the multi-purpose platform delivers include

- _____ Flexibility to use a variety of controllers through standard communication ports (e.g. USB)
- _____ Electronic Drive Stability system for smooth running and struggle free control
- _____ Ease of use
- _____ Possibility to plug in extensions for health monitoring and specialty controls
- _____ Modularity: the system is easy to install and repair, does not have to be thrown away if a component gets faulty
- _____ Easy software updates
- _____ Low cost due to the use of widely available standard components
- _____ Integrated services or easily accessible features like wireless environment control, speech synthesis, gesture recognition, self-learning algorithms and calibration, global positioning system, videophone, voice recognition and voice based web browsing
- _____ Remote management of the wheelchair functions and parameters from a smartphone (for carers), alerts etc.
- _____ Enables users to use computers or electronic devices therefore improving their quality of life and potentially becoming employees and contributing to their cost of care

Our supporters include _____ Spinal Injuries Association UK
 _____ MEREK (Rehabilitation Centre) Budapest

Awards

1st prizes

- _____ Singularity University - powered by Google and NASA - CEE&SEE Global Impact Competition 2013
- _____ IVSZ Startup Conference and Competition 2013
- _____ StartUp Underground Conference and Competition 2013
- _____ IVSZ Gyurós Tibor Prize 2013
- _____ The Most Successful Entrepreneur prize by the Minister of Finance of Hungary 2014

Technical details

The Gyroset Guide family of controllers comes in three levels of sophistication catering for the various needs of users, also providing flexibility to follow the path of the user's condition changes over time. These are Gyroset™ Guide Green, Blue and Red.

We have also developed the Gyroset™ Glory headset, a proportional head control, enabling tetraplegic or other heavily injured users to control the wheelchair, the environment, computers etc. with a nod of their head instead of having to use all kinds of cumbersome solutions blocking their vision.

The Gyroset™ solution comes with our own power modules:

Main power module

- 2 channel 64A peak 32A continuous motor driver
- 1 channel 8A for the breaks
- 1 channel 8A for lamps
- configurable motion dynamics from the Gyroset Guide UI
- expansion port
- battery recharge function (extends the range by 25%)
- waterproof

Secondary power module

- 8 channel 24A peak 12A cont. actuator driver
- waterproof



Gyroset™ Glory headset

The Gyroset™ Glory headset is an unobtrusive, lightweight, yet durable headset specially designed to serve the needs of tetraplegic wheelchair users by capturing and processing head gestures. The headset features a complex array of sensors for gyroscopic measurement, wireless communication and blink detection. It also has a large button to switch between modes and for emergency purposes.



Gyroset™ Guide Green

The Gyroset™ Guide Green is a standard wheelchair control device with drive stabilisation algorithms, modular joystick bay and USB charging capabilities

9 DOF IMU drive stabilizer

modular joystick bay with two options:

- Optoforce 3D optical force sensor**
(high sensitivity touch control, sensitivity can be configured)
- optical joystick**
(high durability regular joystick)

USB charger (for charging telephones or other attached devices)

waterproof



Gyroset™ Guide Blue

The Gyroset™ Guide Blue is an advanced version of our high-end wheelchair control device with drive stabilisation, modular joystick bay, environmental control capabilities and the possibility of attaching the user's own mobile phone.

9 DOF IMU drive stabilizer

modular joystick bay with two options:

- Optoforce 3D optical force sensor**
(high sensitivity touch control, sensitivity can be configured)
- optical joystick**
(high durability regular joystick)

IR receiver

IR emitter

433MHz ECU (Environmental Control Unit)

868MHz communication module

- USB host capability for attaching the user's own mobile phone
- using a downloadable application the drive parameters can be monitored and configured

USB charger (for charging telephones or other attached devices)

compatible with Gyroset™ Glory headset

waterproof



Gyroset™ Guide Red

The Gyroset™ Guide Red is the complete version of our high-end wheelchair control device with drive stabilisation, modular joystick bay, environmental control capabilities, built-in touchscreen and software features.

9 DOF IMU drive stabilizer

modular joystick bay with two options:

- Optoforce 3D optical force sensor**
(high sensitivity touch control, sensitivity can be configured)
- optical joystick**
(high durability regular joystick)

IR receiver

IR emitter

433MHz ECU (Environmental Control Unit)

868MHz communication module

- colour touchscreen with embedded Android
- configuration apps where the drive parameters can be monitored and configured
- dashboard
- Environmental Control Unit application
- head control application

USB charger (for charging telephones or other attached devices)

compatible with Gyroset™ Glory headset

waterproof