

Finger Gesture Controlled Intelligent Patient Vehicle

Introduction

It is an industry ready alternate drive solution based upon finger gestures on the capacitive touch screen for manoeuvring the motorized wheelchair. It consists of an affordable and indigenous motion drive incorporated with rear collision detection. Due to the absence of care-givers, currently available mobility solutions needs to be upgraded using alternative drive controls to help make independent mobility possible. The imported version of general purpose motion controllers comes with stiff Joysticks only and are very costly due to which the wheelchair manufacturing in India is expensive at the moment.

Features

- Easy to use sliding finger gesture based touch screen control module with graphics capability have speed control, lock screen & drive screen.
- Finger gesture on touch screen module based alternative drive controller works similar to joystick controller, compatible with any motorized wheelchair chassis available.
- Touch screen proportional controller requires no force to activate and drive.
- Touch contact using finger with the screen activates the device.
- Maintaining finger contact enables full driving capabilities by sliding similar to physical joystick, including turning, veering, and spinning around.
- Alternate drive controller is affordable, universal input capable with option for rear obstacle alert.

Specifications

- Battery input: 2x12 Volt DC
- Max speed upto 12 KMPH
- Drive range upto 15 km
- Current upto 50A maximum
- Load support upto 120 Kg



Applications

Sliding the finger on capacitive touch screen device for elderly/paraplegics with weak upper limbs can make independent mobility possible when a standard joystick isn't the best option.

Status

- Technology transferred to M/s Pentagon Rugged System, Hyderabad.

Finger Gesture Module on Wheelchair Chassis

