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Abstract

Man machine interface is one of the crucial feature of any developed system. A powered

lower-limb orthotic device used for rehabilitation of paraplegics provides a graphical user interface for the subject which can be implemented on the real time control of the wearable orthotic device. The rapid development of modern technology does not pace up with current interfaces since they are obsolete and do not meet the user requirements. The real challenge is to develop a user friendly, low cost and intuitive graphic interface which could be easily availed by the user. The work has been focused on developing a smart user interface using compact touch screen display for easy system up-gradation with minimal changes using simple programmable environment such as LabVIEW. An additional feature of the developed system is the interface between GUI touch display and real time controller which makes the system even simpler. NI-SbRIO has been used for control implementation and data acquisition, it has built in FPGA feature that ensures the accuracy of acquired data and high synchronization. The developed interface is very useful in real time operation

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