

Ambient application (Kinect)



Kinect is the worldwide most known and used solution for detecting user movements with no need of physical sensors located on the user. Initially launched just to be plugged in the Xbox 360 (so initially aimed at videogames/entertainment consoles players), Microsoft decided to launch a Windows version as well, in order to expand the target audience of the device, as well as its goals and objectives.

The innovative technology behind Kinect is a combination of hardware and software contained within the Kinect sensor accessory that can be added to any existing [Xbox 360](#) or PC running Windows. The Kinect sensor is a flat black box that sits on a small platform, placed on a table or shelf near the television (if you're using it with your Xbox 360) or your PC.

The advantage of this equipment is that it is easily accessible to any citizen or health institution.

Within the TEMIS project, the goal is to develop a Kinect application that will characterise and measure an individual's movements. The aim is to use the equipment for medical purposes and more particularly in the proposed project to characterise movement for neurological diseases. The targeted population is patients suffering from **Parkinson's disease**. The aim is to non-invasively evaluate neurological pathologies that cause abnormal movements that may vary in intensity and occurrence during the day or from one day to another, and which the clinical practitioner has to evaluate.

Technical integration tests are planned for this solution before it is deployed for tests on healthy volunteers or patients.

[More about Kinect @TEMIS project](#)