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## ALIGNMENT THE SCIENCE





The ePAD allows cost effective precise location of the Center of the Acetabulum in both Sagittal and Coronal Planes. By precisely locating the true point of origin of the Ground Reaction Force (GRF) while ensuring equal weight bearing the ePAD points out the true location of the Acetabulum.

Applying this knowledge together with advanced polycentric technology will provide Amputees with an efficient and secure anatomical gait.

## ePAD: The Electronic Precision Alignment Device

## What does it do?

For any force applied to the ground there is an equal and opposite force. This force is termed the Ground Reaction Force (GRF). In the case of the foot on the ground, it is the summation of all the forces applied by the foot to the ground. The GRF is a vector, it has a point of origin and a direction.

The ePAD Sensor Pad shows precisely where the "point of origin" of the GRF vector is located in Sagittal and Coronal Planes. In neutral Stance, when placed at the "point of origin" the vertical line produced by the self leveling laser goes through the exact location of the center of the acetabulum. It would be impossible to locate with precision without the ePAD. Efficient prosthetic alignment requires the proper positioning of the knee and ankle in relation to the center of the acetabulum.

The Weight Pad ensures even weight bearing on both legs, which is essential for an accurate assessment of the GRF Vector.

