A SIXTH SENSE DESIGNED FOR WORKERS’ SAFETY WHEN AROUND ELECTRICITY.

ALWAYS ON. ALWAYS AWARE. ALWAYS SAFE.
“An Unrestrained Demon”
Since the first introduction of GFCIs in homes, there has been an:
• 83% drop in electrocutions
• 95% drop in electrocutions caused by consumer products.

The Consumer Product Safety Commission estimates that:
• 47% of current electrocutions could be prevented with proper GFCI protection
Electroreceptors (Ampullae of Lorenzini) and lateral line canals in the head of a shark.
Imagine holding a current-carrying wire in your right hand.

Point your thumb in the direction of current flow (that is, from positive to negative)...

... and your fingers will point in the direction of the magnetic field.

This illustration shows a technique called the right-hand rule, which can help you find the direction of a magnetic field made by an electric current.
Energized Object

Minimum Approach Distance

Reasonably Likely Movements of Employee
D. Provisions for inadvertent movement. The minimum approach distance must include an "adder" to compensate for the inadvertent movement of the worker relative to an energized part or the movement of the part relative to the worker. This "adder" must account for this possible inadvertent movement and provide the worker with a comfortable and safe zone in which to work. Employers must add the distance for inadvertent movement (called the "ergonomic component of the minimum approach distance") to the electrical component to determine the total safe minimum approach distances used in live-line work.

The Occupational Safety and Health Administration based the ergonomic component of the minimum approach distance on response time-distance analysis. This technique uses an estimate of the total response time to a hazardous incident and converts that time to the distance traveled. For example, the driver of a car takes a given amount of time to respond to a "stimulus" and stop the vehicle. The elapsed time involved results in the car’s traveling some distance before coming to a complete stop. This distance depends on the speed of the car at the time the stimulus appears and the reaction time of the driver.

In the case of live-line work, the employee must first perceive that he or she is approaching the danger zone. Then, the worker responds to the danger and must decelerate and stop all motion toward the energized part. During the time it takes to stop, the employee will travel some distance. This is the distance the employer must add to the electrical component of the minimum approach distance to obtain the total safe minimum approach distance.
• Purchase
  • At employee hire
  • During significant improvements in technology
  • Contractor requirement, visitor condition

• Training
  • Online training videos that explain how the products function.
  • An on-site demonstration and training that can be sticky, simple, and easily replicated
  • Mandatory for use with the Compass Device

• Policy
  • All employees
  • All trainees
  • Compulsory

• Recordkeeping
  • Issuance, use, successes and failures

• Deployment
  • Must come with training and buy-in
  • Is a good indication of a willingness to make Safety Investments

• Life-cycle
  • 1-year full-coverage warranty.
  • 5-6 years with normal battery charging

• Storage
  • Store PVD’s in a cool, dry environment.
  • Make sure the PVD is left off during storage- traveling electrical field measurement