

Mind-controlled prosthetic arm debuts

Looking like something out of a Hollywood sci-fi movie, the new *Atom Touch* prosthetic arm allows users to control movement, and even individual fingers, using their minds

Control:

When user thinks of moving part of their missing arm, neural signals are sent from brain to residual limb and read by **cuff** worn on upper arm – process called **electromyography**



Price: \$25,000 – same as currently used body-powered prosthetic hooks

Fingers: Control individual digits, with haptic feedback from each one aiding user's motor controls

Powered wrist:

Enables natural degrees of movement to turn door knob, hold glass of wine and many other routine tasks

Forearm: Houses battery and computer

Thumb: Bends at each joint like real thumb

Cuff: Sensors detect electrical signals from residual limb muscles and instruct robotic arm to move

Support:

Arm attaches to lightweight, breathable garment to distribute weight (*approx 2kg*)

