

PRODUCT CONTRACT

Product Description: Battery Free Remote Control (Human powered energy generating mechanism for handheld device).

Intended User: Consumer electronics owners.

Market: In-home consumer electronics.

Customer Needs	Product Attribute(s)	Engineering Specifications
Allows for an uninterrupted TV watching experience.	Actuation noise	Level of noise at 1m from ear is less than 65dB.
	Duration of charge	10 power actuations generate enough charge to last at least 1 day.
	Effort required to charge	Total force required per pump is less than 70N.
Equal or superior usability to normal remotes.	Weight	Total weight between 100g and 400g.
	Compactness	21cm x 10cm x 4cm in smallest configuration.
	User familiarity	Button orientation similar to normal remotes.
	Handedness	Operable by either left or right hand.
	Charge indication	Provides power reserve indicator.
	Intuitive use	Random user spends less than 5 seconds to understand how to charge remote.
Capable of lasting a long time.	Repeatable impact resistance	Can be dropped from 1.5m height more than 60 times and function normally.
	Lifetime	Average lifetime during normal use is greater than 10 years.
	Operable under excessive power actuation	Electrical and mechanical components capable of withstanding infinite amount of power actuation cycles.