Purple Team

Battery-Free Remote Control

Purple Team
PowerCLICK
PowerCLICK
PowerCLICK
5 MILLION BATTERIES SAVED
“I’m 42 and I don’t give a rat’s a** about the environment.”

“How loud is this going to be?”

“My grandmother’s got arthritis, so she can’t push very hard.”

“Are lefties going to be able to use this thing?”
Power Pack
Power Storage

- DC Motor
- Protection Circuit
- LED

Excess Energy

- Capacitor
  - Fully Charged
  - Remote

~150 Clicks
Power Pack

Power Generation

- Efficiency: Motor vs. Dynamo
- Motor Selection
  - Small size
  - High voltage to speed ratio
    - ~6V at 3000 RPM
Power Pack
Power Generation

User requirements: Easy to press

1/2 lb Force ➔ Gearbox ➔ Motor: 3000 RPM ➔ 6 Volts
Power Actuation
Power Actuation

Trigger Interface
How It Works
Form

Future Directions
User Feedback

“I think I’d even do it when I’m bored and distracted.”
“This is a lot more lightweight than I thought it would be.”
“The noise isn’t really a problem. If I turn up the TV, I probably won’t even hear it.”
Business Case
Manufacturing Cost

Motor = $0.68
Trigger = $0.03
Power Pack Housing = $0.07
Capacitor = $1.40
Additional Power Pack Manufacturing Cost = $2.18
Business Case

Strategy

PowerClick Technologies

Remote Control OEM

Provide technical expertise as consultants

Manufacture and sell remotes,
Generate profit from additional sales

Cable/Satellite Providers

Pass remotes on to service subscribers,
Attract additional customers

Cable/Satellite Users

Use & gradually accept new technology,
Save money on batteries
Questions?

1. "Click! Click! Click!"
2. "This stupid remote doesn’t work!"
3. "It probably needs new batteries."
4. "Click! Click!"
5. "Who is it?"
6. "I don’t know. All I hear is "Click, click, click.""

[Comic strip showing an elderly couple trying to use a remote control]
Power Pack
Circuit Board Design