


Touch Switch

DESIGN RATIONALE

Introduction

The Touch Switch can control 3.5 mm audio outputs like in the Xbox Adaptive Controller and other switch adapted products. This device may benefit users with limited hand dexterity and strength who find it challenging to trigger mechanical switches.

Research

Device	Price	Link
	~\$200	Capacitive Touch Button Selection (bannerengineering.com)

Requirements

Goals

G01	Allow users with limited hand dexterity/strength trigger switches
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Functional Requirements

F01	Activate switch operated devices through a 3.5 mm mono jack
F02	Use capacitive touch to trigger a switch

Non-functional Requirement

NF01	Housing should be printed without supports
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Constraints

C01	Built with 3D printed and off the shelf components
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DESIGN RATIONALE

Detailed Design

- Design by Jeffrey Ebin and submitted to [forum](#).
- Capacitive touch switch with 3D printed housing.

Opportunities for Improvement

- Battery operated.
- BOM refined for low quantity builds.