# Introduction

The Switch Adapted Peppa Pig is an adapted “Peppa Pig Oink-Along Songs Singing Plush Doll” that can be used with a 3.5 mm assistive switch. This adaptation is intended for users that have difficulty activating the button inside of the Peppa Pig toy.

# Research

## Existing Commercial Options

|  |  |
| --- | --- |
| Title | Peppa Pig Giggle & Snort - Switch Adapted Toy |
| Link | <https://www.spectronics.com.au/product/peppa-pig-giggle-snort-switch-adapted-toy> |
| Vendor | Spectronics Inclusive Learning Technologies |
| Cost | $120 plus shipping |
| Notes | Located in Australia |

|  |  |
| --- | --- |
| Title | Switch Adapted Peppa Pig Giggle |
| Link | <https://www.merushop.org/product/switch-adapted-peppa-pig-giggle-and-snort/> |
| Vendor | meru |
| Cost | £25.00 (Approximately $42 CAD) plus shipping |
| Notes | Located in the UK |

## DIY Designs

|  |  |
| --- | --- |
| Title | SWITCHED Adapted Toys - Peppa Pig |
| Link | <https://www.youtube.com/watch?v=008dOfm0GBU&ab_channel=SWITCHEDadaptedtoys> |
| Author | SWITCHED Adapted Toys |
| License | Not stated |
| Notes | **Toy is no longer available** |

# Requirements

## Goals

|  |  |
| --- | --- |
| G01 | Make a Peppa Pig toy more accessible by adding the ability to use an assistive switch for operation. |

## Functional Requirements

|  |  |
| --- | --- |
| F01 | The toy is operated with the use of a 3.5 mm assistive switch. |

## Non-functional Requirement

|  |  |
| --- | --- |
| NF01 | Toy is relatively easy to adapt so that others can do it themselves with our assembly manual. |

## Constraints

|  |  |
| --- | --- |
| C01 | Cost less than $50 so it is less expensive than commercial options. |

# Ideation

This Peppa Pig toy was chosen because there was a desire in the community for switch adapted Peppa Pig toys.

Originally, a mono jack was going to be used, but after opening up the electronics compartment it was found that there wasn’t much room for a mono jack. For this reason, a mono cable with a female (jack) end was chosen instead. This also allows the cable to stick out of the Peppa toy, which is easier for users to plug in and unplug their assistive switch, rather than having to open up the plush toy each time.

To provide strain relief, and prevent the solder joints from being broken if the cable were to be pulled, a zip tie was added near the hole where the cable exits the electronics compartment.

# Detailed Design

In the photo below it can be seen where the mono cable needs to be soldered, where the hole was drilled for the cable, and the zip tie is also shown.

A picture containing indoor

Description automatically generated

The below photo shows where the mono cable sticks out the back of the toy, easily accessible to plug in an assistive switch.

A mannequin wearing a red shirt and black shoes

Description automatically generated with medium confidence

Below is a photo of the completed switch adapted Peppa Pig Oink-Along Songs Singing Plush Doll with an assistive switch plugged into it. The end cost of this switch adaption is less than $30.

A picture containing wall, indoor, red, pink

Description automatically generated