# 3D Printing Summary

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| --- | --- |
| **Metrics** | **Adaptive Case for PS4 Controller** |
| Total Print Time (min) | 2300 (38h 20m) |
| Total Number of Components | 45 |
| Typical Total Mass (g) | 208 |
| Typical Number of Print Setups | 7 |

# 3D Printing Settings

## Components to Print in PLA

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| **Print File Name** | **Qty** | **Total Print Time (hr:min)** | **Mass (g)** | **Infill (%)** | **Support**  **(Y/N)** | **Layer Height/ Nozzle Diameter(mm)** | **Notes (orientation, special settings, etc.)** |
| All\_Button\_Faces.stl | 1 | 1:05 | 7 | 20 | N | 0.2/0.4 | - Print in orientation given in STL |
| Case.stl | 1 | 9:56 | 71 | 20 | N | 0.2/0.4 | - Print in orientation given in STL |
| Dock.stl | 1 | 3:44 | 31 | 20 | Y | 0.2/0.4 | - Print in orientation given in STL  -Supports are required for the front tab |
| Face.stl | 1 | 10:10 | 96 | 20 | N | 0.2/0.4 | - Print in orientation given in STL |
| Joystick.stl | 1 | 6:29 | 47 | 20 | N | 0.2/0.4 | - Print in orientation given in STL |
| Trigger.stl | 1 | 6:24 | 45 | 20 | N | 0.2/0.4 | - Print in orientation given in STL |

## Components to Print in PETG (If available)

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| **Print File Name** | **Qty** | **Total Print Time (hr:min)** | **Mass (g)** | **Infill (%)** | **Support**  **(Y/N)** | **Layer Height/ Nozzle Diameter(mm)** | **Notes (orientation, special settings, etc.)** |
| Button\_Tails.stl | 1 | 0:32 | 3 | 20 | N | 0.2/0.4 | - Print in orientation given in STL |

**Note:** The “Button Tails” transfer the force from the buttons on the case to the buttons on the controller. Due to repeated stress, it is recommended that these components are printed in PETG to help prolong their lifespan. If unavailable, PLA can be used but the part may need to be replaced over time.

# Customization Options

Users may request their choice of print colour. It is recommended to print the “All\_Button\_Faces.stl” in a different colour than the “Face.stl” to help with visibility.

# Post-Processing

The “Dock” is the only component that requires support material to be removed. Inspect and ensure that all components are smooth, and holes are free of print material. Sharp edges and rough surfaces can be smoothed down with sandpaper.

# Examples of Quality Prints

## Photos of All\_Button\_Faces.stl

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| --- |
| 3D printed button faces. |

## Photos of Button\_Tails.stl

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| --- |
| The front view of 3D printed button tails. The top view of 3D printed button tails. |

## Photos of Case.stl

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| --- |
| The front of a 3D printed Case. The back of a 3D printed case. |

## Photos of Dock.stl

|  |
| --- |
| The top of a 3D printed dock. The bottom of a 3D printed dock. |

## Photos of Face.stl

|  |
| --- |
| The top of the 3D printed face. The bottom of a 3D printed face. |

## Photos of Joystick.stl

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| --- |
| The front view of various joystick toppers. The top of various 3D printed joystick toppers. |

## Photos of Trigger.stl

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| --- |
| Various 3D printed parts to build the trigger assembly. |

**Note:** The “Trigger Mounts” (in the centre of the photo) have print in place moving parts. Ensure that the hinge can rotate freely.