OpenFlightSimConsole Throttle quadrant

Gerge

VIEW IN BROWSER

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Summary

This is an open source Airbus-style centre pedestal for flight simulator

Gadgets > Video Games

Tags: joystick airplane flightcontroller airbus a320 flightsim flightsimulator arduinojoystick

This page contains the instructions and files for printing and assembly of the throttle quadrant module. (electronics and other details for the whole unit on main page “OpenFlightSimConsole base”)

Fusion 360 model is provided for anyone to customize or remix the design. (potmount.stl design was lost)

BOM:

2x 10K potentiometers with 6mm diameter shaft

2x push buttons

small PCB prototyping board for buttons

bunch of 3mm diameter metal pins of various lengths (cut some nails without the head)

6x 20mm (cover joining pins)

4x 30mm (throttle-head joining pins)

2x 40mm (reverser spring center pins)

2x 25mm (reverser lever center pins)

~6mm long self tapping plastic srews ~2.5mm diameter (joining internal push rods)

12 10mm M3 countersink head bolts (side covers)

2x 25-30mm long 5-10mm diameter strong springs (reverser)

8x 10mm M4 bolts (cover screwplates on bottom)

4x 10mm M3 bolts (adjustable potentiometer mount)

8x 10mm M3 countersink head bolts with nuts for mounting to lasercut plate

Dust cover (optional) 40cm x 22mm plastic sheet with cutout for axis rod and reverser on the bottom of the throttle body. There are slots for the cover to slide in on each side and exit the bottom at each end.

for detent mechanism (optional)

2x 3.5mm Diameter ballpoint pen springs approx 2-3cm long

4x 4mm ball bearings (can also use plastic pearls)

8x 10mm M3 countersink head bolts for mounting detent plates

Printing:

All parts can be printed without support (see part list in assembly manual pdf)

Assembly:

Assembly is described in the attached pdf

Calibrate according to the instructions on the “OpenFlightSimConsole base” page

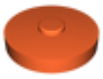
Model files

reverser_blockpin.stl

detentplate.stl

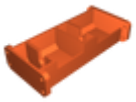
reverser_rotatorhub.stl

throttle_body_cover.stl



throttle_head_blankplate.stl

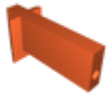
cover_mid.stl



potmount.stl

cover_side.stl

reverser_pushrod.stl



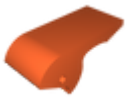
throttle_head_switchlever.stl

frame.stl

throttle_axis_rod.stl

cover_screwplate.stl

switchplate.stl



reverser_lever.stl

throttle_body.stl

throttle_head.stl

throttle_final-v11.f3d

Other files

throttle_assembly.pdf

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