



Congratulations on purchasing your flight simulation hardware from Aerosim Solutions! Your components are manufactured using high quality materials with robustness and dependability high on the priority list during construction. I am confident my products will well and truly outlast the 12 month warranty offered on parts and labour for all products and they will continue to provide many years of trouble free operation.

Note: The components manufactured by Aerosim Solutions are built for flight simulation purposes only and are not suitable for use in real aircraft.

### **Generic base for mounting throttle levers**

This unit is a solidly constructed mechanism built from Trovidur PVC and clear acrylic sheeting. The short lever mounts have a maximum rotation of 90 degrees, the 3:1 gear ratio rotates the 10 Kohm potentiometer through 270 degrees maximizing the potentiometer's variance of signal. The unit will attach to any interface card that supports analog inputs.

The two outer bolts near the bottom hold the unit together and are not normally adjusted, however they can be replaced with longer bolts for attachment to the TQ box. Some customers have placed small 90 degree angle brackets to these bolts which permits the unit to be screwed down to a flat surface. The three inner bolts are dual purpose. The top two inner bolts provide maximum travel stops for the throttle levers. (When the throttle box has been built, the slots on the top of the throttle box will then determine how far the levers can actually move). These three bolts are threaded into one of the side plates and the nuts act as lock nuts. Before any friction adjustment can be made, the locknuts must be loosened. Friction on the lever movement can be increased by slightly tightening the inner three bolts in a clockwise direction. This has the effect of squeezing the case to tighten the levers. When the desired friction has been achieved, tighten the lock nuts again. Minimal torque is required so do not over tighten the fasteners! For users wishing to add a trim wheel axle or an axle to mount flap and speedbrake levers, the main M8 bolt can be replaced with an 8mm diameter axle. (8mm is recommended, if you use imperial 5/16' rod some freeplay to the movement will become apparent). The M8 bolt will easily slide out, the central components should stay in place while you slide the 8mm rod through the unit in place of the bolt.

The only maintenance required would probably be just a light lubrication of the components every couple of years or so. Partial disassembly may be required to do this. The unit will not be damaged by CNC, WD40 and similar types of light spray lubricant. Contact Gwyn Perrett at Aerosim Solutions if any further information or clarification is required!

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