Cockpit Simulator
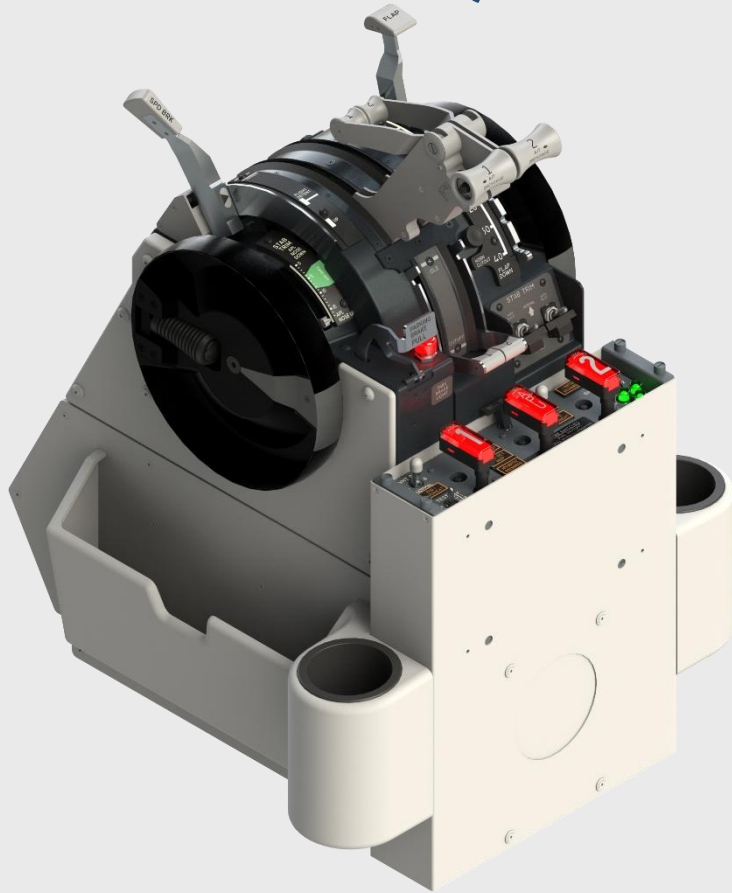
CS737 全功能油门介绍
Fully-Functional TQ Introduction

CS737 全功能油门操作台 Fully Functional Throttle Quadrant

功能 Functions

- 随动手柄Motorized Synchronous Throttle Levers
- 反推联锁Reverse Thrust Interlock Mechanism
- 电动配平Electric Trim System
- 面板背光Backlit Control Panel
- 自动扰流板Auto Spoiler Deployment
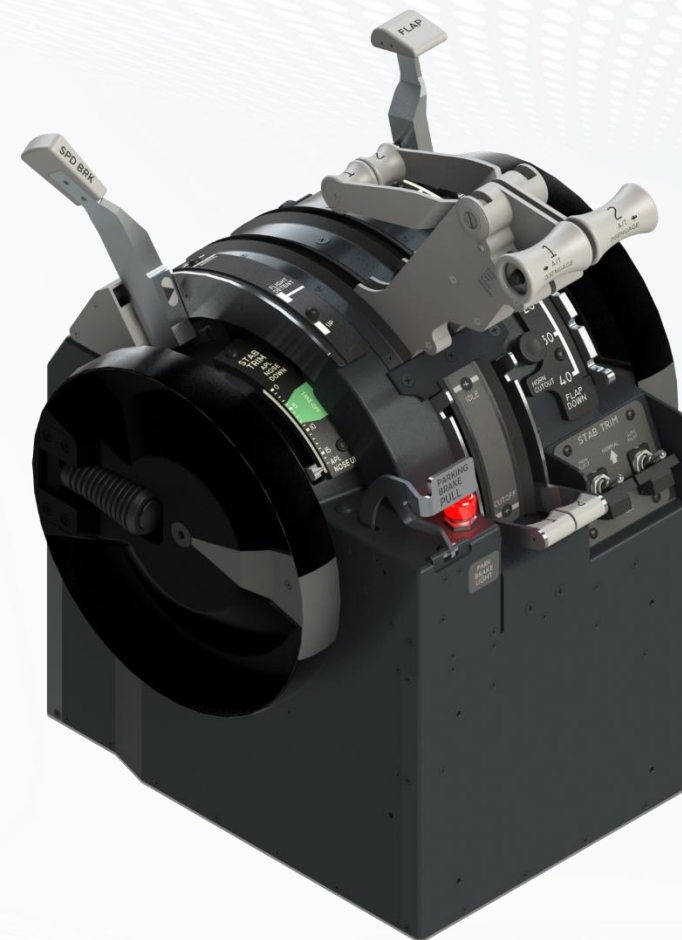
材质 Material

主体结构采用全金属加工、真实的面板尺寸刻度，带背光。All-Metal Main Structure, featuring true-to-scale panel dimensions with integrated

电机 Motors

4个大功率无刷电机和5个步进电机，实现油门手柄、减速板、配平系统等功能的电动操作。Equipped with 4 high-torque brushless motors and 5 stepper motors, enabling motorized operation of throttle levers, speed brakes, and trim system

构型

可选737NG与737MAX两种构型结构，两种类型的启动手柄与停留刹车开关样式。Available in two structural configurations — 737NG and 737MAX — each with corresponding start lever and parking brake switch styles.

详细介绍
Detailed Introduction

材质Material

主体采用全金属打造，面板刻度带有背光，支持模拟软件内同步调节背光亮度。The main body is made of full metal construction. The panel is engraved with backlighting, and supports synchronized adjustment of backlight brightness within the simulation software.

电机Motors

4个大功率高效无刷电机、5个步进电机分别驱动正推手柄、减速板、配平轮、配平指针等部件工作，并自动同步模拟软件内状态位置。Equipped with 4 high-power, high-efficiency brushless motors and 5 stepper motors, which respectively drive the thrust levers, throttle quadrant, trim wheel, flaps lever, and speed brake lever. These components automatically synchronize with the in-software status and positioning of the simulation program.
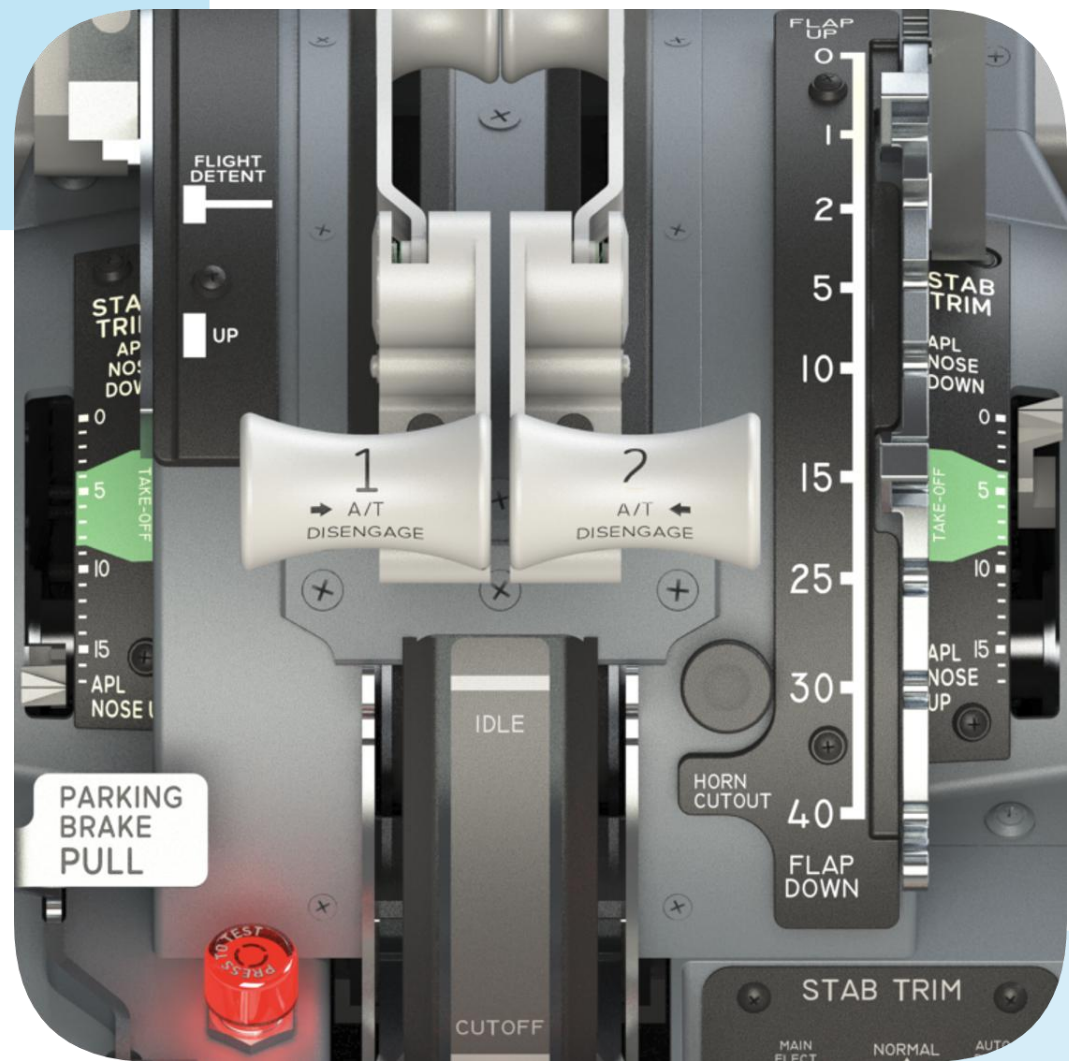
油门控制手柄Throttle Control Levers

- 正推手柄：左右独立信号，单独控制不同发动机。可随模拟软件内自动油门实时位置联动移动，带有机械离合装置，支持在自动油门状态时手动强制操控。
- Forward Thrust Levers: Independent signals for left and right engines, allowing separate control of each engine. The levers move in real-time synchronization with the auto-throttle system in compatible flight simulation software. Equipped with a mechanical clutch, the levers support manual override even when auto-throttle is engaged.

- 反推手柄：左右独立信号，单独控制不同发动机。内置联锁结构，当正推手柄未处于最小位置时，反推不能提起；当反推提起后未完全放下，正推手柄不能移动。
- Reverse Thrust Levers: Independent signals for left and right engines. Built-in mechanical interlock prevents reverse thrust levers from being raised unless the forward levers are fully retarded. Likewise, forward thrust levers cannot be advanced if the reverse levers are not fully stowed.

- 按钮电门：自动油门解除（A/T DISENGAGE）与起飞/复飞（TO/GA）按钮各2个，独立信号。
- Auto-Throttle Buttons: Includes two independent A/T DISENGAGE buttons and two TO/GA (Takeoff/Go-Around) buttons, each with its own signal channel.

减速板手柄 Speed Brake Lever

- 自动放出：同步软件内飞机落地状态，预位后自动放出减速板，并可与反推手柄联动，当提起反推时，减速板手柄自动被顶起，脱离DOWN卡位。

- Auto Deployment: When armed and the simulated aircraft is detected to have landed, the speed brake lever will automatically deploy. It also interacts with the reverse thrust levers—when the reversers are pulled up, the speed brake lever is automatically lifted out of the DOWN detent.

- 自动收回：手柄放出后，正推手柄移动一定距离，减速板手柄自动收回。

- Auto Retraction: After deployment, the speed brake lever automatically retracts when the forward thrust levers are advanced beyond a certain threshold.

- 飞行卡位：在飞行位提供锁定功能，当识别到飞机在空中，减速板不能移动到UP位置。并附带两种构型刻度面板。

- Flight Detent Lock: A locking mechanism is implemented at the FLIGHT detent to prevent movement to the UP position while airborne, based on simulated aircraft status. Comes with dual configuration panel markings.

配平和襟翼 Trim and Flap System

- 配平轮同步飞行状态电动旋转，支持自定义调整旋转速度，并带有止动位置锁。
- Trim Wheel: Electrically driven rotation synchronized with in–flight trim status. Rotation speed is adjustable and can be customized. Includes detent locking mechanism for defined stop positions.
- 可折叠的把手，可打开手动摇动配平轮。
- Equipped with foldable handles that allow for manual trim adjustment.
- 左右两侧同步的配平刻度指针，跟随飞机状态自动同步移动。刻度面板带有背光。
- Dual trim position indicators on both sides move in real–time based on the simulated aircraft state.
- 配平切断电门，带有保护盖，防止误触。
- Trim Cutout Switches: Feature protective safety covers to prevent accidental activation.
- 襟翼手柄带有9档卡槽，在1和15卡槽分别带有限制卡位，完全还原真实飞机操作状态。
- Flap Lever: Includes 9 detent slots, with mechanical resistance at positions 1 and 15, fully replicating real aircraft operation.
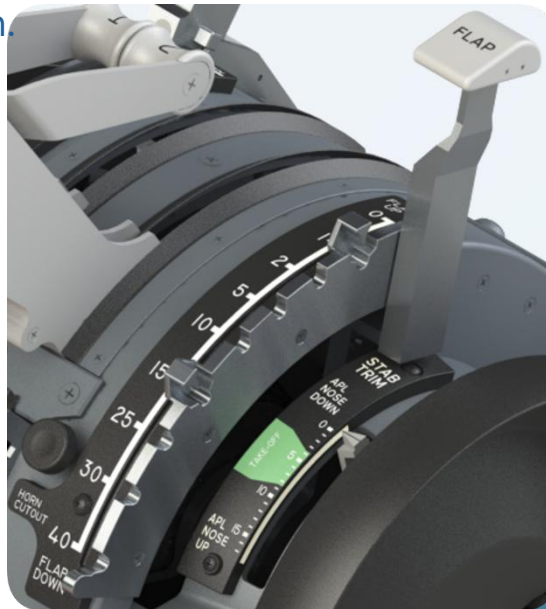
构型可选
Selectable
Configuration

两种不同样式的供油手柄与停留刹车构型，只在外观上的区别，实现的功能是一致的。
Two different styles of fuel control levers and parking brake mechanisms are available. The differences are purely cosmetic, with identical functionality across both variants.

停留刹车：内置锁定机构，必须输入刹车信号才能提起手柄，在锁定状态后，输入刹车信号自动解锁手柄。
Parking Brake:
Features an internal locking mechanism—the lever can only be lifted after brake input is detected. Once locked, the brake input will automatically release the lever for disengagement.

发动机启动手柄：不同形式的手柄都需要向外拉出手柄才能上下拨动。
Engine Start Levers:
Regardless of style, all variants require the lever to be pulled outward before moving it up or down.

仿真底座 Simulated Pedestal Base

- 另可选装仿真的底座，以便于玩家搭建完整的模拟舱，额外包含：左右文件盒、左右水杯架、过热和火警面板。
An optional simulated pedestal base is available to help users build a more complete and immersive cockpit setup. It includes additional components such as: Document holder, Cup holder,Overheat and fire panel.
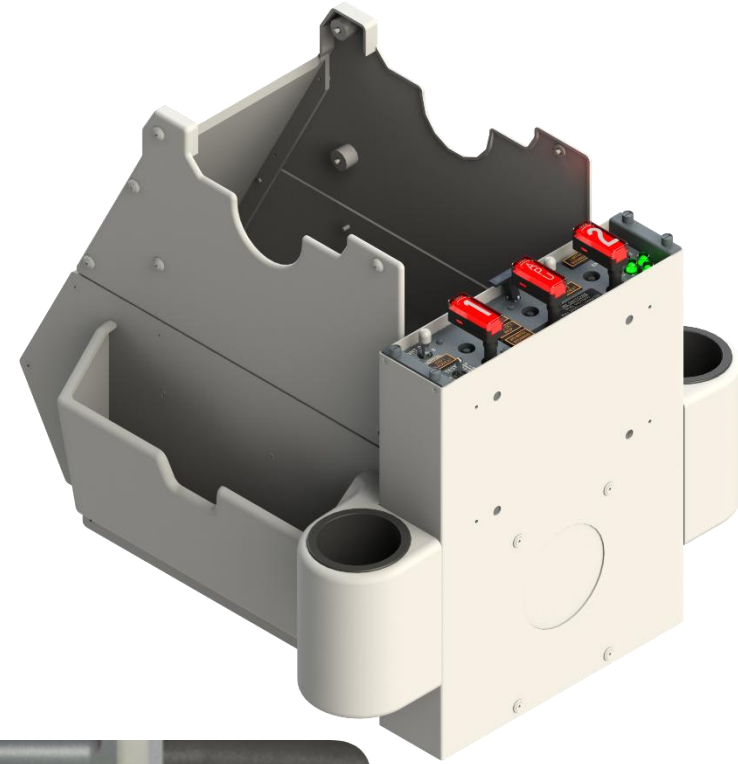
仿真底座Simulated Pedestal Base

- 过热和火警面板全功能还原了飞机操作，其中有
  The Overheat and Fire Warning Panel fully replicates aircraft operations, including:：
  1. 过热探测器电门（带限位）Overheat detector switch (with guard)
  2. 火警铃关断电门（按钮）Fire warning bell cutout switch (pushbutton)
  3. 灭火瓶测试电门（自复位）Fire extinguisher bottle test switch (momentary, spring-loaded)
  4. 故障/不工作和过热/火警测试电门（自复位）Fault/Inop and Overheat/Fire warning test switch (momentary, spring-loaded)
  5. 3个灭火手柄（带电磁解锁与手动解锁，解锁后才能提起并旋转）3 fire extinguisher handles (with solenoid lock and manual lock; must be unlocked before pulling and rotating)
  6. 8个长方形指示灯（带按压检测功能）8 rectangular indicator lights (with push-to-test function)
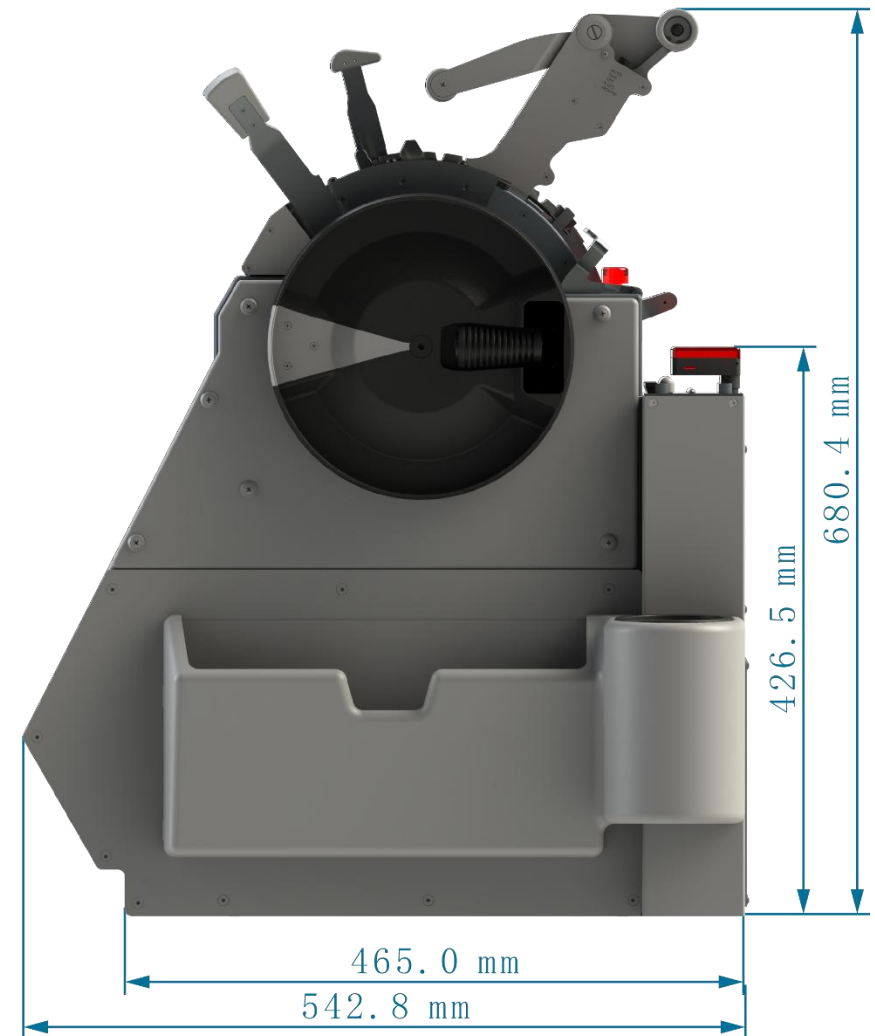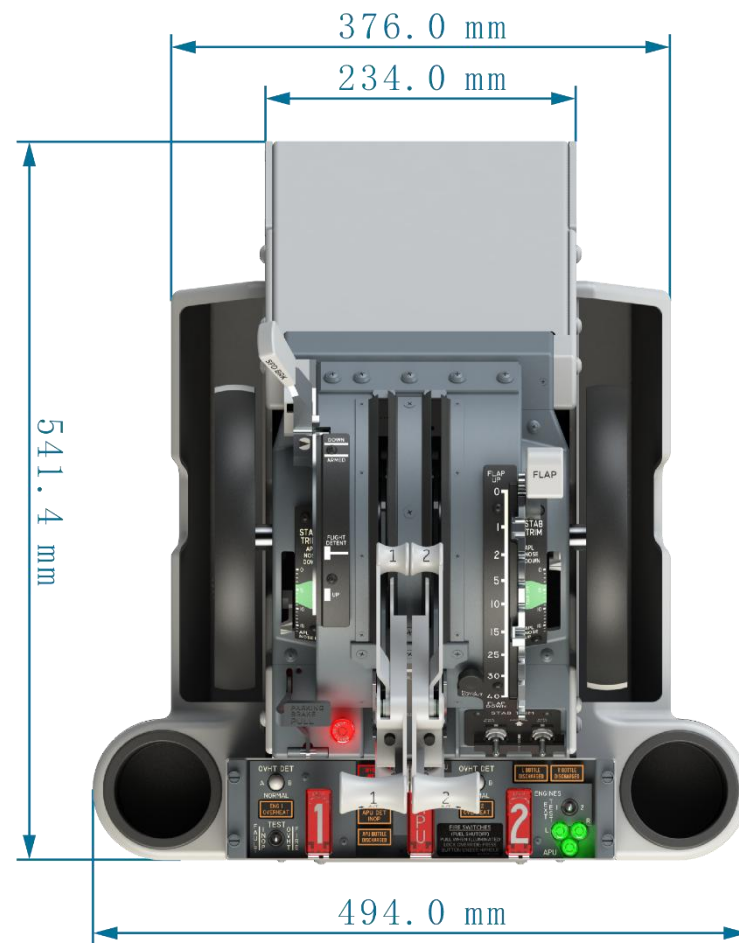 7. 3个灭火瓶测试灯 3 fire extinguisher bottle test lights
  8.
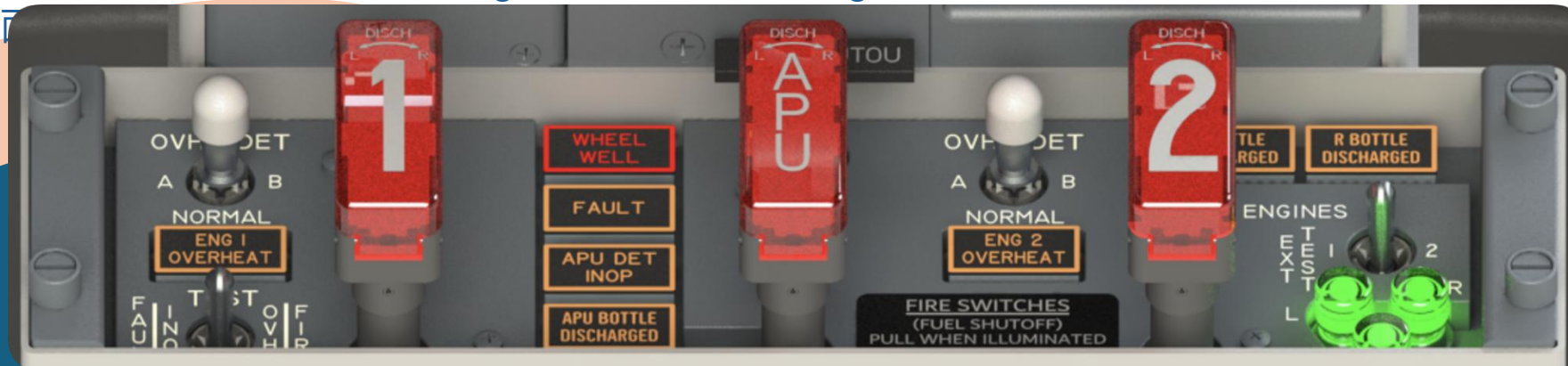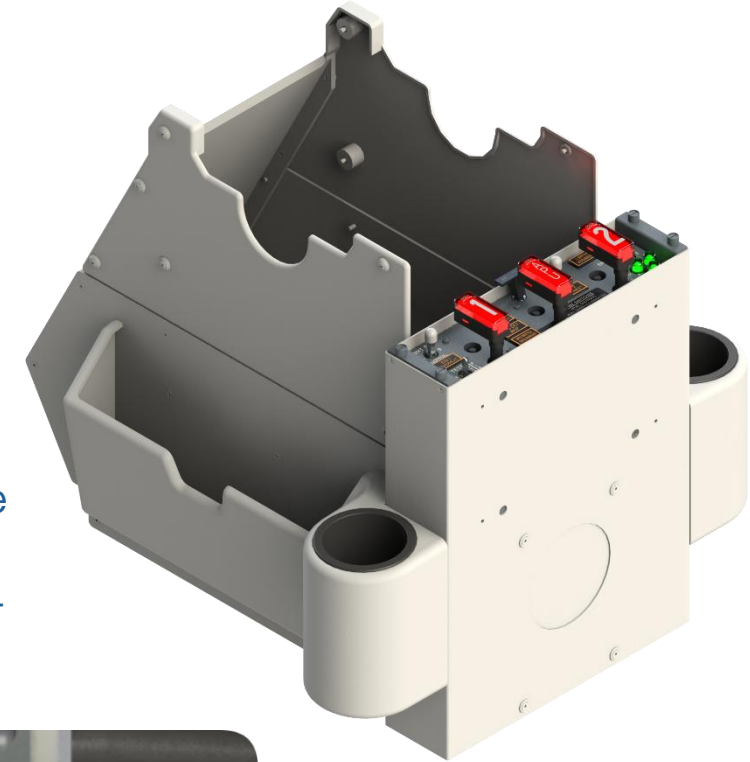
尺寸参数 Dimensions
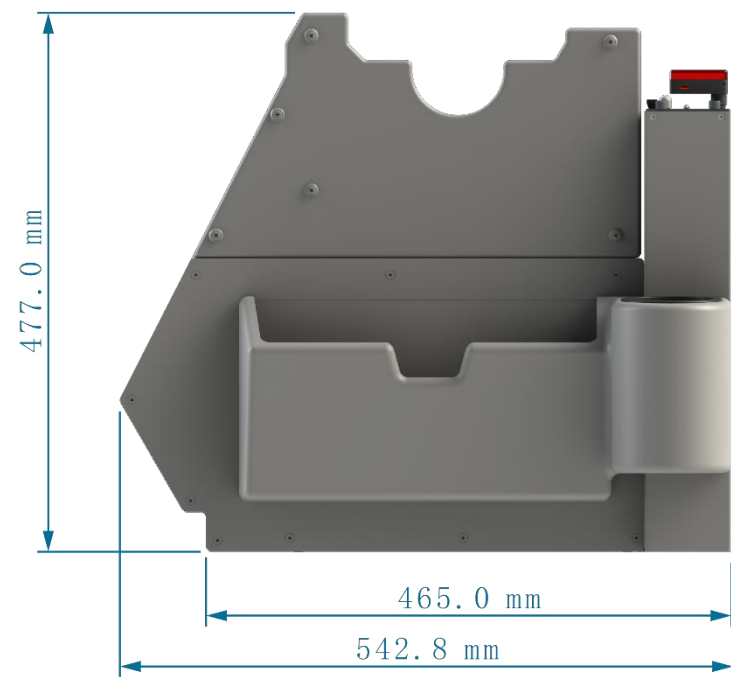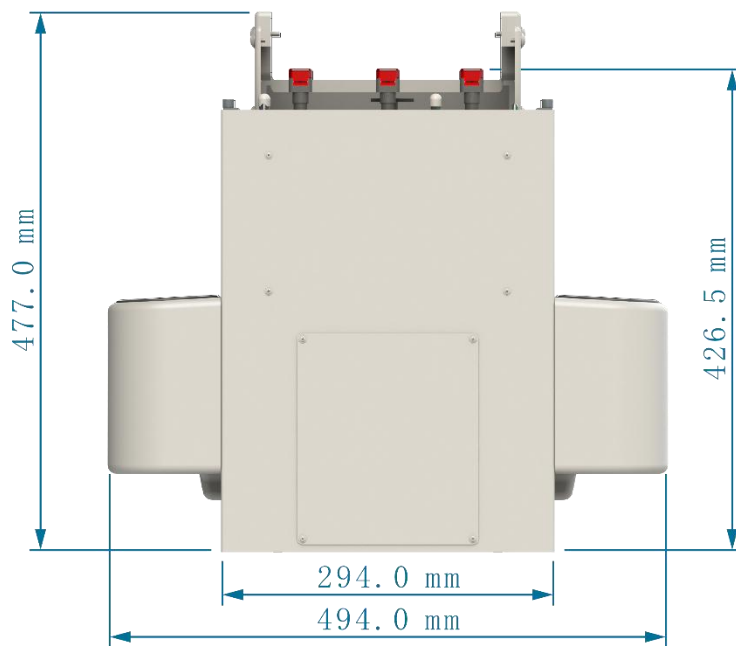
737NG&MAX 基础款 Without base
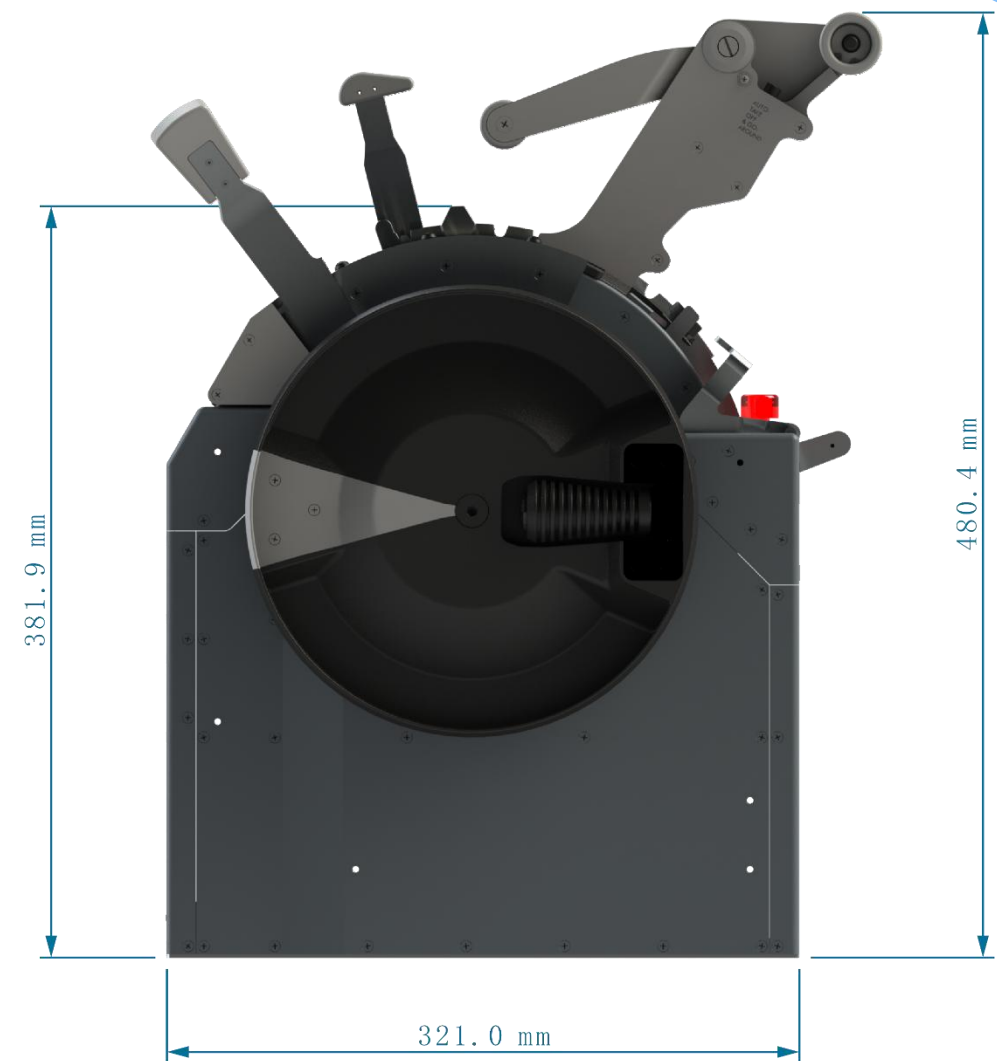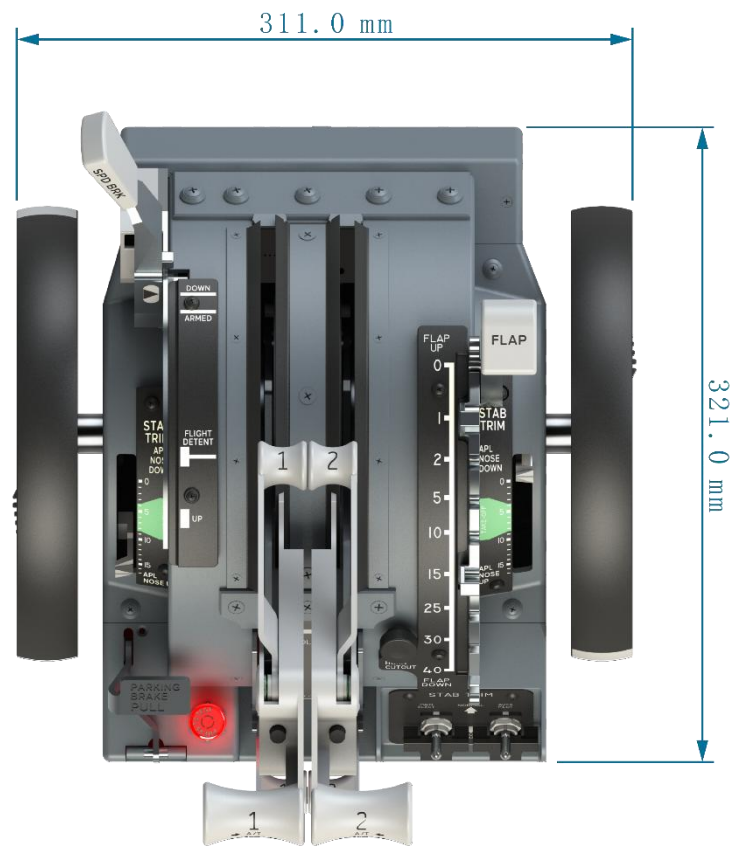
尺寸参数 Dimensions

737NG&MAX 带底座 With base

376.0 mm

234.0 mm

541.4 mm

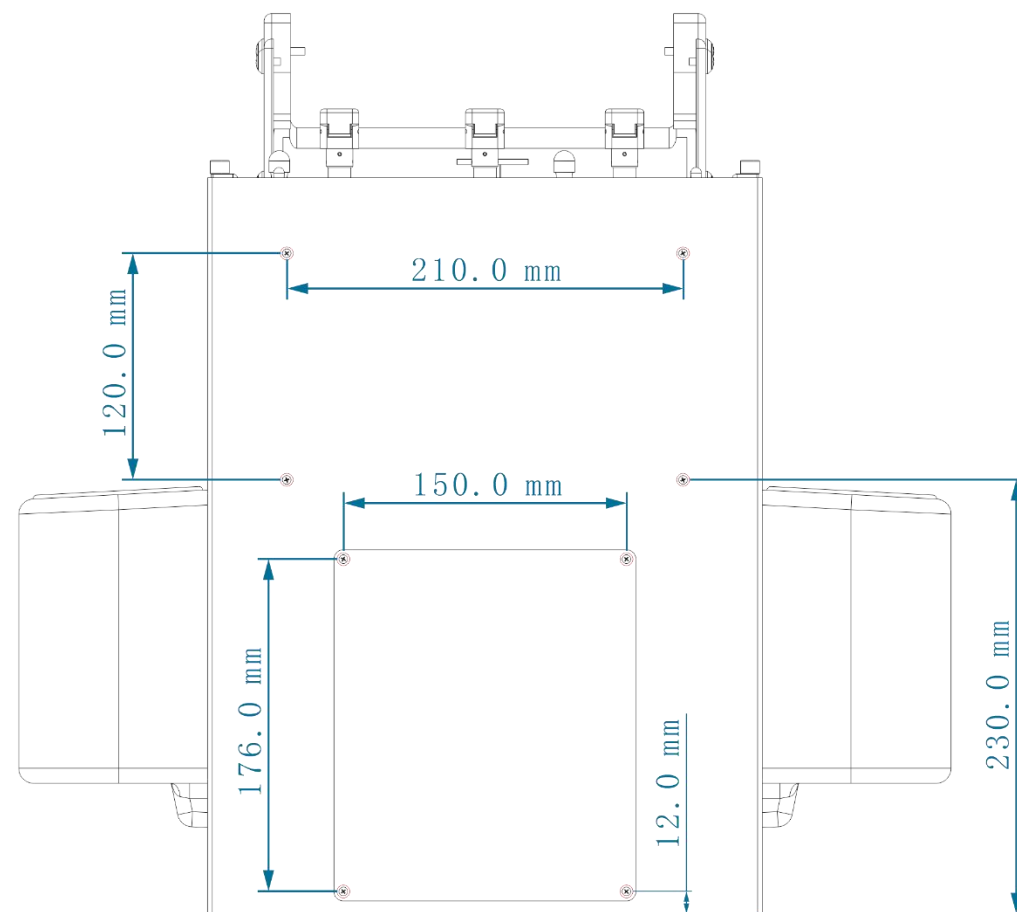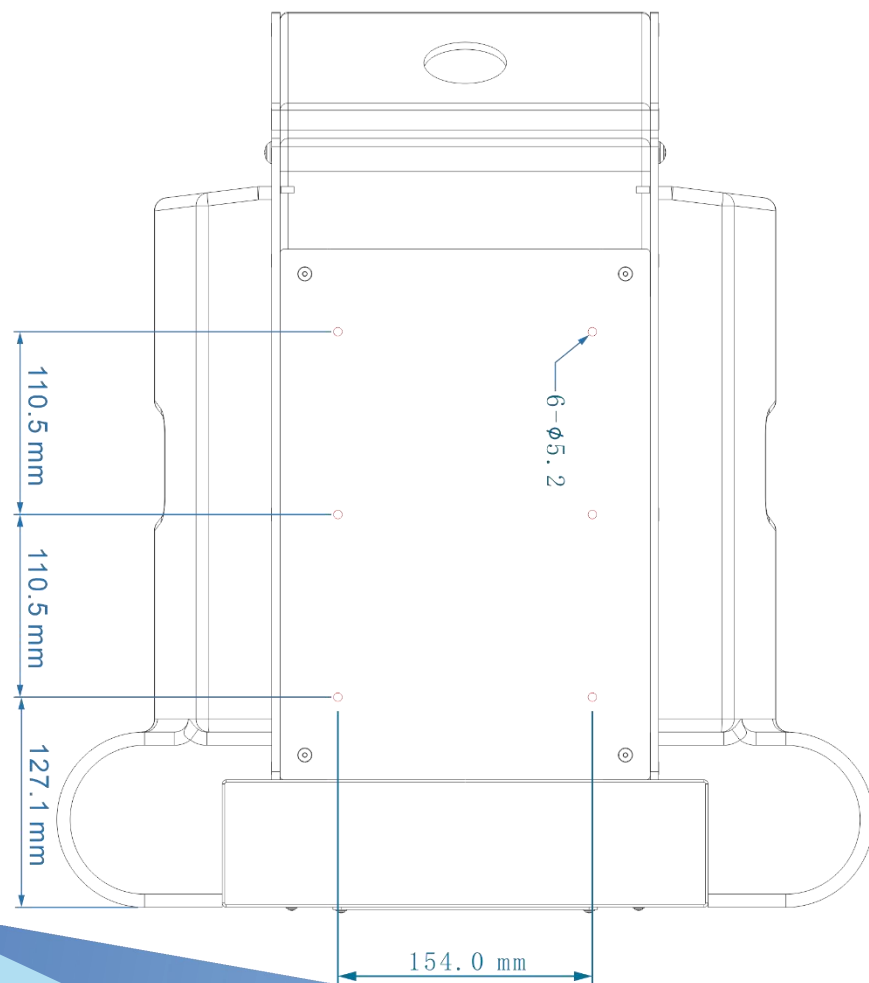494.0 mm

680.4 mm

426.5 mm

465.0 mm

542.8 mm

尺寸参数 Dimensions

底座外尺寸 Base Overall Dimensions
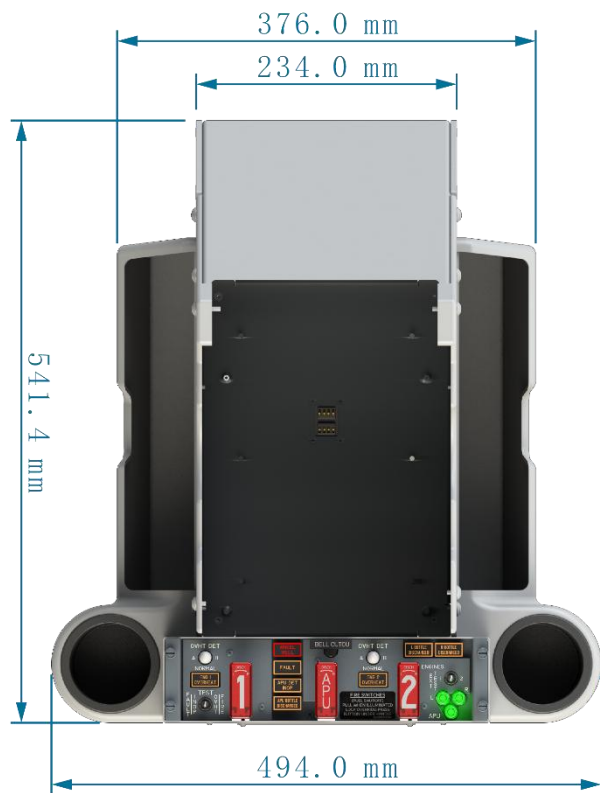
尺寸参数 Dimensions

底座安装孔 Base Mounting Holes

効果展示
Demonstration

www.cockpit–simulator.com