

Key data

Base area	68 x 63 cm (27 x 25 inches)
Operational floor area (approx.)	2m x 1m (full racing/flight system)
Height (inc. seat)	122 cm (48 inches)
Degrees of freedom	2 (pitch & roll)
Maximum velocity	71.2 degrees/second
Maximum torque	64.4 Nm
Maximum pitch & roll	+/- 13.5 degrees (total 27 degrees)
Min. recommended rider height	120cm (4')
Max. recommended rider height	200 cm (6' 7")
Max. payload *	140 kg (308 lbs)
Shipping weight (approx., racing/flight system)	60 kg (110 lbs)
Average power consumption (approx.) **	200w
Universal AC input	88-264 AC
CE compliant	

* Max payload = controllers + rider, assuming close proximity of payload centre of gravity to device centre of pitch & roll. In any case, large loads situated far from the unit's centre of pitch & roll (e.g. very heavy pedal sets or monitors) are not recommended.

** Actual power consumption depends on device settings & input. Power consumption under full power = 250w approx. Theoretical maximum under abnormal conditions = 320w.

Construction

- Chassis: powder coated mild steel.
- Controller mounts: powder coated aluminium alloy.
- Table and foot rest spines: stainless steel.
- Motion base cover: ABS.
- Other plastic components: acetal & HDPE.
- Ball raced drive train/suspension.
- Dual 400mm/s 10kg force (98.1N) actuators. Patented load compensating technology maximises actuator performance & longevity.



Safety features

- Large, easy-access emergency stop button.
- Trap sensors halt motion in the event of a trap between moving section and base.
- Optional 4 point safety harness.

Customisation

- Extension support legs and castors can be replaced with brackets for fixing to ground surface.
- Reversible control layout for left or right hand drive configurations.
- Seat brackets can be customised to accommodate non-standard seats (see Seats section).
- Control mounts can be custom drilled to allow use of controllers not accommodated as standard (see Controllers section).
- A development base with a flat top is available, in order to fit user defined components. Please consult AMS to discuss your requirements – custom payloads are still subject to maximum loading specifications.
- Multi-seat rides via our RideNet device networking system using standard ethernet cables.



Development base for customisation of non-seat configurations

Seats

- A3 Motion Systems are shipped with a black fabric covered bucket seat.
- Longitudinal seat adjustment allows for payload centre of gravity to be set correctly.
- Adjustable seat reclination.
- Most off the shelf side-mounted seats can be accommodated, although special mounting hardware may be required.
- Standard bracket mounting hole longitudinal centres 290 mm.
- Supported seat width range 310-470 mm between boss faces.
- Specialist mounting kits can be supplied for base mounted seats.

PCs & displays

The A3 Motion Simulator operates as a PC peripheral only. It is not currently supported by gaming consoles, mobile devices etc. It operates independently of other PC peripherals, therefore displays (including HMDs), controllers and other peripherals should be selected based on their compatibility with the software titles to be used. Although the PC requirements to run the Actuate Motion software, which drives the A3, are minimal, we recommend a minimum core i7 processor, Geforce GTX 980Ti graphics card or above to run most games.



Controllers

The A3 has dedicated mounting holes for the PC supported controllers made by the manufacturers in the table opposite. Other controllers can be accommodated by drilling custom holes into the mounts. Please contact AMS for advice on specific controllers.

Type	Controllers	Website
Logitech	Driving & Flight	www.logitech.com
Thrustmaster	Driving & Flight	www.thrustmaster.com
Saitek	Flight	www.saitek.com
Fanatec	Driving	www.fanatec.com

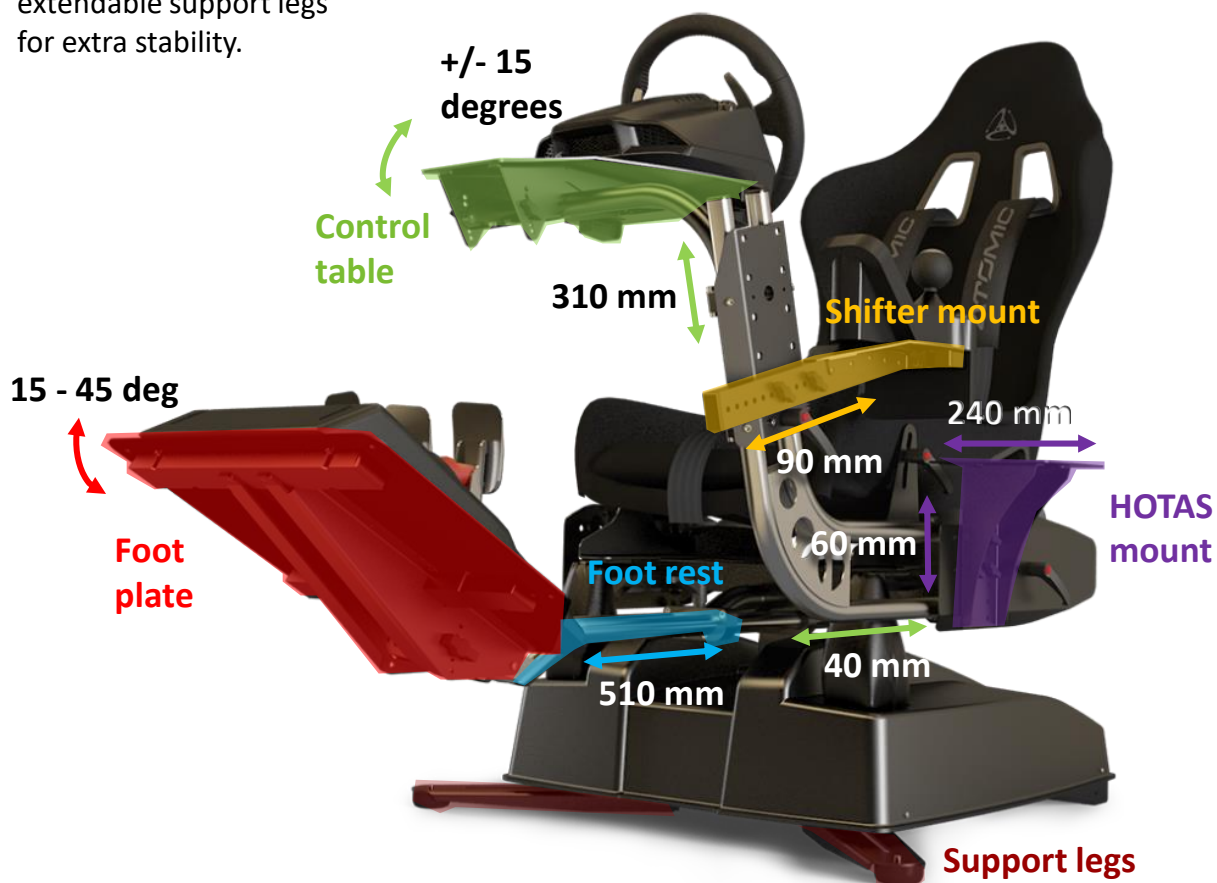


Motion Software ACTUATE MOTION

- Actuate Motion software is provided with the A3 simulator, supporting 64 bit Windows 7, 8/8.1 & 10 and Linux.
- Actuate Motion aims to support popular games soon after release; a simtools plugin is supplied for games not natively supported.
- Custom games and projects accommodated using the SDK, which includes dedicated plugins for Unity and Unreal Engine 4 and UDP / shared memory access for other programmes.

Adjustment

- Independent adjustability (as illustrated in figure below) for steering wheel mount, shifter mount, foot rest and HOTAS mounts provides optimum comfort for a large range of riders and accommodation for a wide range of controllers.
- Tool-less adjustment of main points allows for a fast and smooth changeover.
- Adjustable feet and extendable support legs for extra stability.



Transportation & stowage

- Racing/flight system, total net weight ~ 51kg.
- Gross shipping weight (including pallet & packaging) ~ 70kg.
- Shipping dimensions (standard box), length 120cm, width 80cm, height 70cm.
- Disassembly of seat and mounts in minutes for compact transportation, even in a modestly sized car.
- Integrated castors allows relocation by a single person.