

MP4D-M8020 4-DoF Motion Platform

High performance · Robust · Versatile

- Compact 4-DoF motion base for mounting medium payloads (recommended 750kg max)
- High performance and load capacity in a compact form
- Configurable for multi-user purposes
- Easily adapted with customised habitation



4-DoF platform, including semi-transparent standard deck

The top sub-structure, with 3 ACM-20 actuators, is mounted onto a continuous rotation platform to provide a powerful yet compact 4-DoF motion platform.

- Fully ball-raced crank & ball screw actuator mechanism (no plain bearings)
- High powered BLDC motors utilising high speed closed loop FO control system
- Powerful performance and minimum maintenance in a compact form



ACTUATE MOTION

Delta Kinetic motion platforms utilise Actuate Motion, a modern motion software interface which natively supports many commercial titles. Its SDK has dedicated plugins for Unity and Unreal Engine 4 and UDP access for other programmes, allowing integration with almost any software.

Key data

Degrees of freedom 4 (pitch, roll, heave & yaw)

Payload 750 kg (Max. recommended)

Dimensions (mm, excluding superstructure, with standard deck)

Footprint (base)	Deck dimensions	Deck height at rest	Weight
990 (l) x 1140 (w)	1410 (l) x 740 (w)	385	121 Kg (motion base, 101 Kg)

Motion

	Heave	Pitch	Roll	Yaw
Range	200 mm	+19.2° -19.8°	+/-16.8°	+/-720° std Unlimited optional
Speed	750 mm/s	146 °/s	126 °/s	271 °/s
Force/torque	1536 Kgf	4021 Nm	3482 Nm	797 Nm
Resolution	0.0023 mm	0.00046°	0.00039°	0.00085°

Power requirements (UK) 220VAC, 50Hz, 13A single phase

Control interface USB or RS485 connection to host PC

Safety features Normally closed failsafe emergency stop loop for multiple e-stop buttons. Stop and hold position on loop break. Fall arrest on power failure.

*** Figures are approximate only. Actual figures will depend on configuration & usage conditions.*

A multi-purpose motion platform for applications including land, sea & air vehicle training



4-DoF platform with seat and fighter control habitation

The 4-DoF platform can be easily adapted to provide specialised training simulators for a range of land, sea & air vehicles.

We can design space optimised habitation to replicate many cabin environments and vehicle controls, to enable trainees to undergo fully immersive VR vehicle training.



4-DoF platform with truck driver cabin habitation