CKAS Thruxim / Thruxim Max / Thruxim Pro

Introduction

The CKAS Thruxim / Max / Pro is the ultimate home use or entry level professional motion simulation platform, with a high fidelity 2 degree of freedom, 3 degree of freedom or 6 degree of freedom motion system, and convenient upper structure to allow the simulator builder to construct a **low cost single seater** motion simulator very quickly and efficiently.

Target Applications

- **Small Scale Low Cost Entry Level Flight Training Applications**
- **Small Scale Commercial Vehicle and Truck Driver Training Simulators**
- **Small Scale Mining Equipment Simulators and Heavy Earth Moving Equipment Simulators**
- **Small Scale Train Driver Simulators**
- **Home Built Flight Simulators**
- **Home Built Car Racing Simulators.**

General Description and Capabilities

The CKAS Thruxim is based around the CKAS T2s 2DOF Motion System, the Thruxim Max around the CKAS U2s 3DOF Motion System and the Thruxim Pro around the W3s 6DOF Motion system, which all feature some incredible response and fidelity. The Thruxim range allows a professional simulator builder or home user to "instantly" build a motion simulator from typically available components such as monitors and gaming controllers, often already purchased for previous home set ups, and finally adds the most sought after quality of a real simulator - motion.

The CKAS Thruxim floor sits very low at only 300mm high, therefore eliminating the need for any specialised stair or gangway for stepping up onto it.

The expected life of the Thruxim is extremely high for its price point, and the maintenance requirements are minimal, especially important in commercial or consumer based applications.

The CKAS Thruxim / Max / Pro comes with the following key features:

- One of CKAS T2s 2DOF or U2s 3DOF or W3s 6DOF Motion Platforms (CE Certified for use in Europe)
- Flat packed raw MDF rigid framework and assembling hardware (screws/brackets/etc) which requires some very basic assembly to hold the main structure on the motion platform and provide a “table top” for controllers such as steering wheels or yokes
- Rigid prefabricated steel structure to hold up to three typical 24” LCD or LED monitors (VESA 75 or VESA 100 mounting holes) for total immersion.
- Folded steel brackets for mounting a typical “auto” style seat to the motion system.

The following items are NOT included in a CKAS Thruxim / Max / Pro:

- Computer is not included – most customers already own a high end computer with all the gaming or simulation software installed
- Monitors are not included – most customers already own monitors for gaming, or alternatively they can be purchased locally cheaper than being shipped from CKAS in Australia (24" with low profile bezel recommended)
- Gaming Controllers are not included – Most customers already own high end gaming controllers of their own choice and virtually all of them are designed to “grab” onto the edge of a desk or table top
- Seat is not included – Due to the awkward shape of a racing seat and typically heavy weight, it is very costly to ship them from Australia. These are always available locally cheaper from an automotive parts supplier.

For more information about software compatibility and performance characteristics, please see data sheet for CKAS T2s 2DOF Motion System (2DOF Low Cost Systems), CKAS U2s 3DOF Motion System (3DOF Low Cost Systems) and CKAS W3s 6DOF Motion System (6DOF Low Cost Systems).

General Specifications

(Subject to change without notification)

Product Name	CKAS Thruxim	CKAS Thruxim Max	CKAS Thruxim Pro
Product Code	THRUX	THRUXMAX	TRHUXPRO
Product Number	15.0001.11	15.0002.11	15.0003.11
Product Description	Small Scale 2 degree of freedom Simulation Platform	Small Scale 3 degree of freedom Simulation Platform	Small Scale 6 degree of freedom Simulation Platform
Harmonization Code (HS)	Electrical machines and apparatus, having individual functions, not specified or included anywhere. Typical numbers include: 854370 or 854380 or 8543.70.96.50 or 8543.70.90.99		

Mechanical Specifications

Framework material	Raw Flat Packed Pre-cut Medium Density Fibre Board (MDF)		
Visual System Architecture	Powder Coated Triple Monitor Support Mild Steel Prefabricated Bracket		
Visual Field of View (w monitors)	115^{o} Horizontal x 24^{o} Vertical (at the design eye point)		
Seating Architecture	Powder Coated Pre-folded Generic Seat Rail Brackets		
Motion System Adaptability	CKAS T2s 2DOF Motion System (T2sMP)	CKAS U2s 3DOF Motion System (U2sMP)	CKAS W3s 6DOF Motion System (W3sMP)
Nominal Width (with monitors)	1575 mm (62.0”)		
Nominal Length (with seat)	1500 mm (59.1”)		
Nominal Height (with monitors)	1373 mm (54.1”)		
Approx unit weight	115 kg (254 lb)	165 kg (364 lb)	235 kg (518 lb)
Anchoring Specification	Not required for this simulation platform		

Performance Specifications

Available User Payload	190 kg (420lb) includes all user mounted equipment and persons	270 kg (600lb) includes all user mounted equipment and persons
Available User Moment of Inertia	60 kg.m^2 (1,420 lb.ft^2)	100 kg.m^2 (2,370 lb.ft^2)
Payload CG horizontal offset	Less than 50mm from Centroid of Flying Platform	
Payload CG Vertical offset	Less than 600mm high from top of Flying Platform	

For more information about performance characteristics, please see data sheet for CKAS T2s 2DOF Motion System (2DOF Low Cost Systems), CKAS U2s 3DOF Motion System (3DOF Low Cost Systems) and CKAS W3s 6DOF Motion System (6DOF Low Cost Systems).

Electrical Specifications

For more information about electrical characteristics, please see data sheet for CKAS T2s 2DOF Motion System (2DOF Low Cost Systems), CKAS U2s 3DOF Motion System (3DOF Low Cost Systems) and CKAS W3s 6DOF Motion System (6DOF Low Cost Systems).

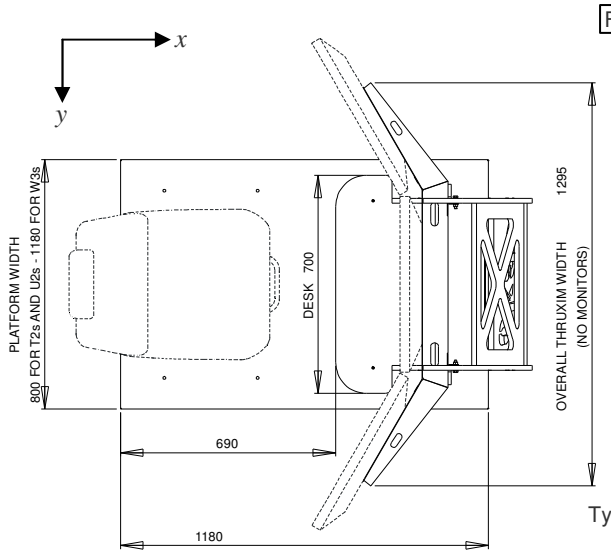
Software Specifications

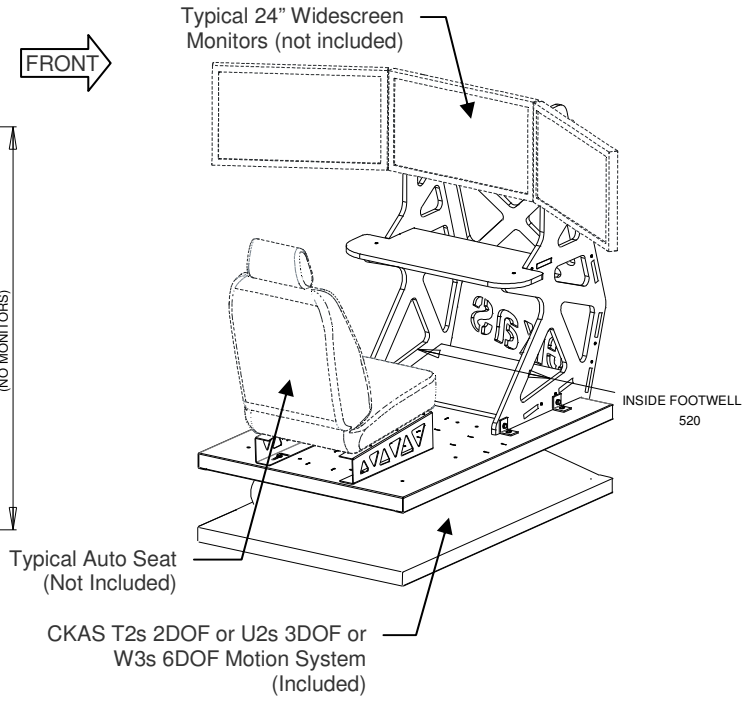
For more information about software compatibility, please see data sheet for CKAS T2s 2DOF Motion System (2DOF Low Cost Systems), CKAS U2s 3DOF Motion System (3DOF Low Cost Systems) and CKAS W3s 6DOF Motion System (6DOF Low Cost Systems).

CKAS Thruxim / Pro / Max Engineering Dimensions

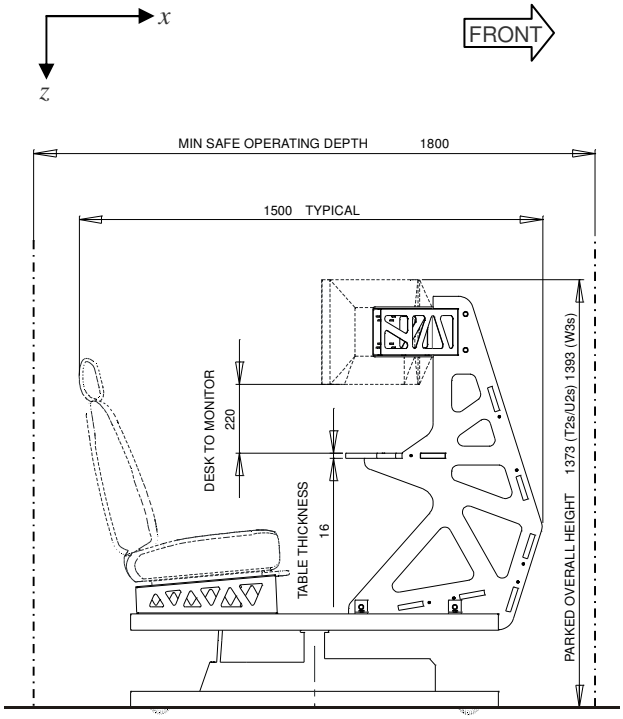
(Subject to change without notification)

View of Simulation Platform from TOP





View of Simulation Platform from RIGHT



View of Simulation Platform from FRONT