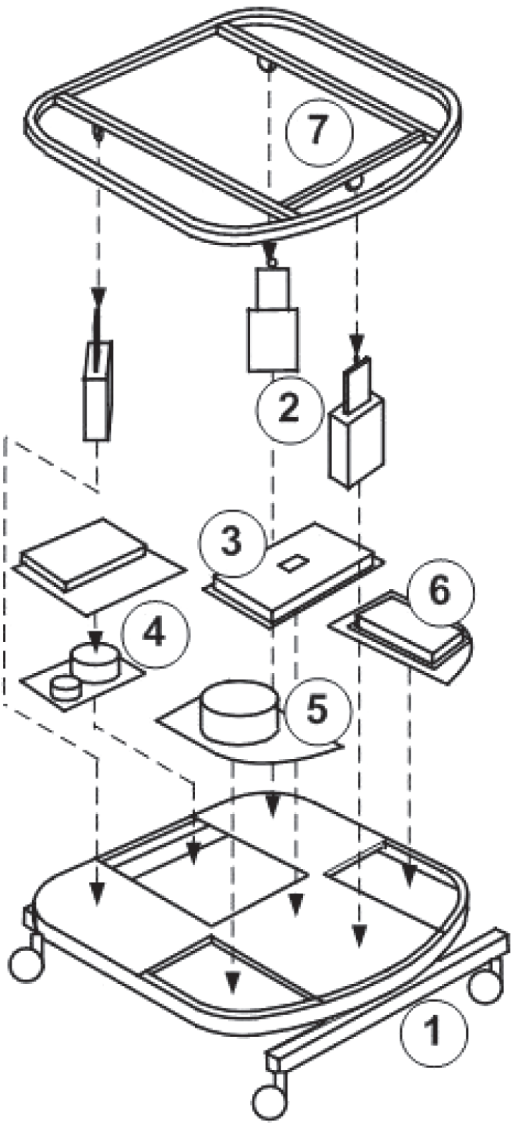
THE CYBERSEAT

"BARE BONES" MOTION PLATFORM



>*1: The Base Frame.* This steel frame supports the rams and other modules. It is powder-coated in black gloss, but other colours are available on request. When mounted to a Base frame or to the floor, a gap of 10mm is provided underneath for cables from any direction. It is delivered on castors for easy movement.

>*2: The Rams.* The Cyberseat designed linear motor rams support the load without the need for any further frame, so minimising the number of moving parts. The flat blades which provide the motion have hardened edges to reduce wear. Each ram is secured by just two bolts, with a third bolt to support the top-frame. A simple plug completes the electrical installation.

>*3: The Control Module.* The Cyberseat designed Control Module provides the motor control for the linear motors and an on board computer. The standard version includes provision for most applications with connection points for on/off buttons, seat belt verification, e-stops, etc. Optional extras include provision for coin or swipe-card operation, multi-base usage, remote diagnostics, and many others.

>*4: The Power Supply Module.* This module is in two parts: the transformer unit underneath and the control unit above. The transformer unit allows for different supply voltages, so is selected at the time of purchase. The control unit includes indicator light and easily accessible fuses, together with key-switch for isolation of the base.

>*5: The Compressor Module.* The motion platform can take its air supply from an off-base compressor (typical in multi-base installations) or its own simple compressor and receiver reservoir built-in as an optional extra (as shown). The compressor module as standard has provision for both options, together with pressure safety valves to ensure the pressure does not exceed 8 bar.g. It also has connection points for pneumatic add-ons such as the optional foot-rest adjustment mechanism.

>*6: The Valve Module.* Each ram has two cylinders which operate at less than 3.5 bar.g when carrying the standard payload, rising to 5 bar.g with the maximum payload. The cylinders are connected by push-fit tubing to the valve control module which ensures that the weight is correctly balanced. The valves and cylinders are industry standard. The valves have identical, exchangeable solenoids.

>*7: The Top Frame.* A simple 'shipping frame i s supplied as standard to hold the rams in position. This would normally be replaced on delivery with an Operating Top-Frame which would include seats and controls. A bare Structural Top-Frame (as shown) can be supplied on request, which includes the support rim for the bellows together with a frame designed to carry the Standard Payload.

The bare-bones motion platform is supplied with one power-supply lead and UK plug as standard, drawing 13 Amps at 240VAC (3100VA). In certain countries this will be supplied as two leads without plugs, the main at 10 Amp and the auxiliary at 3 Amp, both being 240VAC, 50/60Hz (3100VA). The leads will extend about 3 metres from the centre of the bare-bones motion platform, in any direction, as standard. Alternative arrangements can be supplied. An RCD is recommended.

The bellows are an optional extra. They can be supplied in a variety of colours, or with leaves in alternating colours. Options include different width leaves (50mm is normal) and internal webs to ensure that the folds are evenly spaced as the top moves up and down. When bellows are specified with a bare-bones motion platform (i.e. no seat is ordered), the bare structural top-frame will also be specified rather than the travelling top frame (see above).

The motion platform is supplied with a PC software driver which will allow it to react to any PC game which exposes its telemetry. Specific game drivers are provided for various games including Microsoft Flight Sim 2004 and FSX© and Laminar Research's X-Plane©. Cyberseat will write game drivers on request and a software SDK is available to enable users to write their own motion interfaces.

If required, Cyberseat can supply controls, games computers, displays and simulation software and assist in the integration of a complete simulation system. Optional extra software is available to allow unsupervised use in stand-alone or multi-player applications, and for use as moving seats in cinemas.

A single USB cable is provided for connection to the user's PC, extending about 3 metres from the centre of the motion platform, in any direction. The motion platform has an on board hub for USB connection to peripherals such as flight controls, wheels, pedals and keyboards. The platform also supports a CANbus interface.