



CLS-E MK II HELI RUDDER.

Your choice for certified PTTs and FNPTs up to Level I.

BRUNNER is defining new standards in high performance Active Force Feedback flight simulator devices. As an element of our Control Loading System portfolio of leading drop-in devices, the CLS-E MK II Heli Rudder integrates perfectly into many new or existing PTT and FNPT cockpit environments. Further, it is the perfect match for all ambitious private pilots as a stand-alone Device especially in combination with our CLS-E MK II Yoke. The integrated proportional Toe brakes allow a realistic aircraft simulation. Our CLS-E MK II Heli Rudder provides excellent quality, high fidelity and unique durability at an affordable entry-level cost. It is unmatched in its class: intelligent brushless DC-servo technology, a compact and sophisticated product design and a realistic simulation of flight effects creates

training solutions which provide optimum training value. The BRUNNER CLS-E MK II Heli Rudder is supporting single as well as dual pilot applications. A unique real-time synchronization logic enables unmatched and automatic pilot/co-pilot take-over functionality. Additionally, the CLS-E MK II Heli Rudder simulates and represents various functions like autopilot and trim and allows easy and fast installation and setup through real Plug-and-Play capability. Enabled by our CLS2Sim software-environment, the CLS-E MK II Heli Rudder communicates easily with commercially available simulation software such as X-Plane, MS-FSX, MS-Flight Simulator 2020, Aerofly FS 2, DCS World, VBS 3 and Prepar3D®. Any third party flight simulation solution connects via a simple TCP/IP or UDP remote interface protocol.



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Features.

- BRUNNER Drop-In or stand-alone: all included – with build-in control unit and 36 VDC external Power Supply
- High fidelity for most realistic flight experience
- Proportional Toe brakes
- Simulated effects: engine, ground, turbulence, real trim, autopilot, stall etc.
- Dynamic pressure dependent force profile
- BRUNNER real-time synchronization logic for dual-pilot cockpit with automatic pilot/co-pilot take-over (MCC)
- Plug & Play (USB or CAN), Ethernet via optional high-speed E2CAN gateway
- Reliable, smooth and maintenance free design
- No fan, very quiet, high efficient
- Contactless high-resolution position feedback
- Direct support for X-Plane, MS-FSX, FSX Steam Edition, MS-Flight Simulator 2020, Aerofly FS 2, DCS World, VBS 3 and Prepar3D® with Brunner CLS2SIM SW, X-Plane plugin for Windows
- CLS2SIM License for single cockpit application
- Swiss Made
- 2 Years warranty

Specification.

Peak Force	220 N / 49 lbs
Travel	150 mm / 5.9 in
Interface	USB (USB-2 Type-B), CAN (RJ45), Ethernet via optional high-speed E2CAN gateway
Power	300 W peak
Operating Voltage	24...48 VDC (ext. Power Supply included)
Size	380 x 457 x 176 mm 15 x 18 x 6,9 in
Weight	6.1kg / 13.5 lbs

Dimensions.

