

Limbic®Chair

tech specs

Weight & dimensions

General specs

Chair weight 9.1kg (20lbs)

Chair dimensions L/W/H 52/53-66/61-74cm

Sitting surface height 55-67cm (adjustable)

Cable: USB-C to USB-A Cable, 2.9m

Battery lifetime (for wireless operation): Up to 12 hrs

Battery charging time: 2-3hrs

Materials: Aluminum and plastics, 100% recyclable

Sensors & data output, batteries

Sensors

The Limbic Chair contains 5 sensors, 3 contactless magnetic sensors for yaw detection, and 2 IMUs for detecting pitch and roll of the shells.

YAW sensors:

→ 1 contactless sensor array measures yaw of the center axis of the chair

→ 2 sensors measure yaw-rotation of the seating shells (1 contactless magnetic sensor on the left, 1 on the right, located at the bottom of the rotational axes)

PITCH- and ROLL sensors:

→ 2 IMUs are located underneath the seating shells to measure pitch and roll of each shell individually, 1 on the left, 1 on the right.

The Sensors are connected to the Limbic®Chair's motherboard via internal cables.

The Limbic®Chair's electronics are fully certified by GS and TÜV, and contain FCC IDs, MCQ-XBEE3 and 2ABPY-5B9198.

Sensors & data output, batteries

Data output

Data from the 5 sensors is processed on Limbic®Chair's motherboard and outputted to the LCS (Limbic Control System software, ©Limbic Life software, included) on your computer at a rate of approximately 100Hz.

Data transfer from the chair to the LCS is encrypted (access to the raw data is available with some of our developer packages, see below).

Data transfer happens via USB cable (2.9m, included) or wirelessly.

Batteries

Limbic®Chair contains 2 rechargeable batteries for wireless operation.

Battery lifetime (for wireless operation): Up to 12 hrs

Battery charging time: 2-3hrs

LCS Configuration & compatibility

The LCS (Limbic Control System software, ©Limbic Life, connects to the Limbic®Chair wirelessly or via USB.

LCS turns the encrypted data from the Limbic®Chair into highly configurable output that can control computer functions. These can be everyday functions, like scrolling and zooming or specialized functions, like navigating XR or controlling objects.

LCS lets you assign each axis of the chair and combinations thereof to specific keyboard-, WASD-, mouse-, and mouse wheel functions.

These configurations can be saved for specific applications and auto-apply once set.

Sensors & data output, batteries

Workplace innovation

For example, you can set "both knees up/down" to control the scrolling function in your browser. Like for a mouse, you can adjust its sensitivity.

→ LCS will not use this function on other applications (unless so configured) or when your browser is not in the foreground.

If you choose that 'knees apart/together' does 'zoom in/out' in your image processor, LCS will know to apply this function to your image processor when it is in the foreground, but not to other applications (unless so configured), or when your image editing application is in the background.

→ If you, for example, also configure "one knee up, other knee down" as "rotate", you can already do 2 basic and often-used functions - zooming and rotating - with your Limbic®Chair.

This will make your work more efficient, as your hands can do other things, and more healthy since your back and pelvis are in a constant, gentle flow.

LCS also contains simple, convenient one-button functions, such as RE-CENTER the Limbic®Chair, MUTE, CONNECT/ DISCONNECT.

Navigation in XR

You can assign leg movements to navigation functions in XR. For example, knees apart = accelerate, knees together = decelerate/stop, etc., for precise, seamless, hands-free 3D motion in up to 5 axes.

Configure it any way you like!

Sensors & data output, batteries

Free updates

LCS also provides firmware updates for your Limbic®Chair and lets you set up its connectivity. The Limbic®Chair can be configured to be part of an existing WiFi network or it can generate its own standalone network. LCS is compatible with Windows 10, 11.

Software Packages for Developers

Standard LCS Software (©Limbic Life)

(Windows 10, 11, included with chair purchase)

- Basic Limbic®Chair control functions, such as, MUTE, RE-CENTER, CONNECT/ DISCONNECT
- Setting up wireless functions (WiFi as part of an existing- or a standalone network)
- Setting up customized keyboard, WASD- and mouse- (wheel) functions for different applications running on Windows
- Outputs configurable specifically for each application.

Limbic Controller License

CHF/ EUR 1'000.-+ tax)

- The Limbic Controller License lets your LCS produce game controller-style outputs [-1,+1,].
- These outputs are configurable for axes/combination of axes, as well as i/o ratio and -type.

Raw Data License

CHF/ EUR 6'000.-+ tax

The Raw Data License allows your LCS to output raw chair data in full resolution. Includes the Limbic Controller License.

Full Developer API

CHF/ EUR 8'000.-+ tax

XML to fully configure LCS. Includes the Limbic Controller License and Raw Data License.

Technical Certifications, Packaging & Environment

Technical certifications:

- GS
- TÜV
- Contains FCC IDs:
 - MCQ-XBEE3
 - 2ABPY-5B9198

Packaging:

- Dimensions L/W/H 60 x 40 x 60cm
- Weight 12.5kg
- Packaging made from 100% recycled cardboard

Package contents:

- Limbic®Chair
- USB-C/ A cable 2.9m
- LCS Software for Windows 10,11 (download)

To learn more, please visit our website

limbic-life.com/xr

or email us at

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