

USER GUIDE (UK)



lugdosphère

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General

Release system H1 Lite



Headform H1 Lite with accelerometer



Precautions for use

The Lugdosphère is **intended for use up to 299g** (ie 150% of the criterion gmax of EN1177: 2018). However a too repetitive use close to the acceptable limit is an accelerated aging source for all the embedded components.

Normenjeu draws the attention of the user:



- - On the one hand on soil control with a low thickness (inf 30mm) which presents a significant risk of reaching too strong decelerations.
- - On the other hand, on the limits of Method 2 of Standard 1177: 2018 "Determination of on-site impact mitigation". Indeed, the release being made directly to the height of free fall of the game, in case of soil not at all adequate, the impact can have decelerations too strong. Thus, it is appropriate that the user draws the ground to know its thickness. Thus, depending on his experience and these investigations, the user may decide to make a first impact at a height less than the free fall height of the game.

It is customary to clean the half-sphere and pay particular attention to its surface condition.

The false head is waterproof and is conditioned in a controlled environment.

It is highly recommended that you contact your distributor for service and not open the unit yourself as this will void the warranty and may result in damage to the on-board electronics.

Normenjeu recommends the use of PPE when using the Lugdosphère. The user must take all the necessary recommendations to perform the tests safely and adapt these practices to the test conditions (wind, rain, soil stability ...). In particular, he must be careful not to go under the false head and forbid the passage to any other person.

The lugdosphere allows for manual release as well as a fixed release device such as a tripod. Users are reminded that the measurement uncertainties described in EN1177: 2018 have been determined with tests performed with fixed release devices. Also, the realization of impacts resulting from releases made by hand leads to an increase in the uncertainty of the measurement. This uncertainty is not quantifiable by normenjeu because it is the result of unmaintained and variable factors: user, height, position of the arm, muscular tonicity ...

Remarks

ERR101 - NO HIGH POINT OF CURVE IDENTIFIED

ERR201 - NO START OF IDENTIFIED CURVE

ERR202 - NO END OF CURVE IDENTIFIED

ERR301 - IMPACT TIME LESS THAN 3 MS

ERR302 - IMPACT TIME HIGHER TO 36 MS

Possibilities of disturbance of the connection due to a civil or military interference of the waves, of a high-voltage line, by particular networks in large quantity and magnetic fields.

All of these disorders do not disturb the measurement but the transfer of data to display the curves. It is advisable to approach the pc closer to the head in this case to reduce these disorders.

It is advisable to use the Lugdosphere head while the battery at a level above 20%

It is strictly forbidden to recharge the equipment (head or release system) on an unsecured current socket such as found in vehicles. Risk of short overvoltage that may deteriorate some electronic components.

Advices

When ERR2020 appears try to clean the magnet and the iron plate of the head with a soft cloth.



When pushing the releases system / dropper handle button the head will fall **immediately**.
Be ready !

Is the surface is clear from any object?

Am I at a coherent fall height according to the surfacing thickness and probable impact attenuation properties ?

Am I ready to catch the head in case of need ?(hard object like pole of a play equipment or concrete after the ending of the impact attenuating surfacing)

...

When carrying the Lugdosphere make sure that the button of the handle is not pressed otherwise the 4x AA battery will discharge quickly.

We advise you to have a adequate screw and a pack of spear 4x AA battery in the hardcase.

Technical feature

Material: Aluminum

Feature: 160 mm in diameter & 165 mm in height

Weight: 4600 g

Acquisition: -500G to 500G tri axes

Converter: Analogue digital 12 bit

Height measurement accuracy greater than one centimeter

Display on the head (height, HIC and gmax)

Battery: Lithium

Connection: Bluetooth

Compliant: EN1177-2018 standard

Acquisition frequency: 20kHz

Power supply: 8.4V

Waterproof: Yes

Cleaning and maintenance

To guarantee the maintenance of the technical and metrological characteristics as well as the guarantee of your Lugdosphère, it is advisable to respect the periodicities of your logbook.

The maintenance must be provided by normenjeu in a controlled environment. No part of the equipment must be opened by a third party (no guarantee, risk of damage).

The lugdosphere is designed to work in any type of atmosphere including wet. The material is waterproof. Before storing your device after wet use, wipe the equipment thoroughly before packing.

When testing, it is important to check the gmax of the impacts.

The covered operating range of the device is **up to 299 g max.**

In the context of inspections, it is advisable:

- After a service
- After a calibration
- Before each intervention campaign
- If in doubt

Do a check of the drop height and HCC on a standard slab.