

VISION™

Frequently Asked Questions

> WHAT IS VISION?

Vision is LANDAUER's new flexible and ergonomic dosimeter, designed specifically for lens of eye use. It is based on proven TLD technology and uses 100% thermoluminescent grade lithium fluoride material resulting in a more precise reading with a minimum reportable dose of 0.1 mSv.

> WHY DO I NEED TO USE VISION TO MONITOR LENS OF EYE DOSE?

The 2013 International Commission on Radiological Protection (ICRP) recommended lowering annual lens of eye dose to 20 mSv. The UK IRR17 regulation is making this limit legal.

> HOW DO I WEAR VISION?

Vision is designed specifically for lens of eye application and should be placed close to the lens of eye on Personal Protection Equipment (PPE) ideally on safety glass.

The ideal location is generally defined after occupational studies that will conclude on what is the highest exposed area. We recommend Vision to be positioned on the side protection of the safety glass either on the left or the right.



It can be also placed on the glass providing it does not bother the worker vision

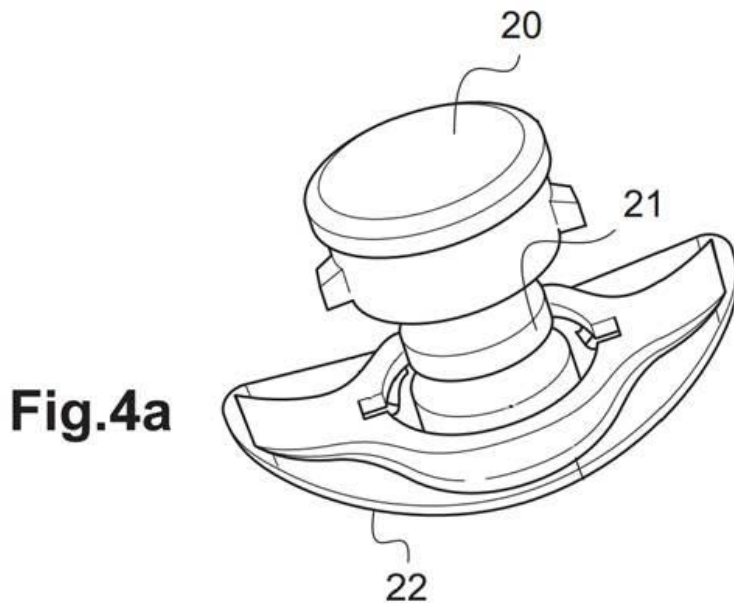


If for some reasons, you'd like to remove the frame from the detector, please proceed carefully as below

> HOW TO UNCLIP PROPERLY?

The two parts containing the TLD chip are welded together using ultrasound, do not pull the detector out of the frame, there's a risk of the detector breaking open.

To unclip, it requires you to push on the bottom of TLD pocket (below #20),



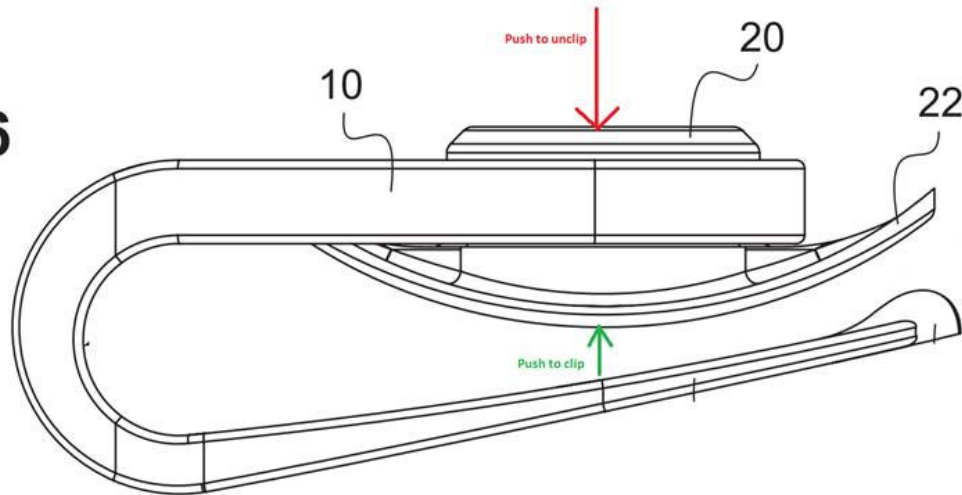
Use a punch with diameter approximately 5 mm in the following way:



> HOW TO CLIP PROPERLY?

To clip: push on the cap (below #22) as per the green arrow direction, while maintaining the clip (below #10).

Fig.6



> WHAT IF THE WORKER DOES NOT WEAR PPE?

The VISION lens of the eye dosimeter is to be worn in conjunction with radiation safety glasses or safety shields, with the detector behind the shielding. If the field is uniform or shielding is not present, the VISION dosimeter should be placed as close to the eye as possible without interfering with the field of view.

In such case head cover, headband or non-shielded glasses could be used

For studying purposes, or in case the participant doesn't wear any PPE, locations and distance requirement remains the same: either on the side or in the middle, as close as possible to the eye.



> WHAT TYPE OF RADIATION DOSE DOES VISION MEASURE?

It measures photon (gamma ray and X-ray) radiation dose equivalent near lens of eye at a depth of 3 mm as denoted by $H_p(3)$ and complies with the EN 62387-1:2015 standard.

> HOW DO I DIFFERENTIATE FREQUENCY AND WEAR PERIODS?

The wear start date is clearly marked on each Vision unit. Other relevant information such as a scannable 2-D barcode, participant name, code for frequency of wear and product serial number are laser etched and not erasable.



> WHAT DOES THE CONTROL VISION LOOK LIKE?

Control dosimeter is a Saturn Ring with red body, yellow cap and "CONTROL" marked on the cap.



> WHO SHOULD USE THE VISION LENS OF EYE DOSIMETER?

Anybody working in an environment with ionization radiation sources who is likely to receive a measurable radiation dose in the lens of eye while performing work.

International scientific publications show that professionals working with radiation emitting equipment in the field of interventional radiology (e.g. fluoroscopy,) diagnostic and other medical procedures or dealing with radioactive materials (e.g. nuclear medicine, nuclear power plant) could be highly exposed.

LANDAUER recommends monitoring and tracking lens of eye dose for these professionals for health and safety reasons. We recommend study over one year to be performed to assess the dose.

> HOW WILL THE DOSE DATA BE REPORTED?

Dose data will be reported in regular reports accessible through myLDR accounts.

> HOW DO I CLEAN VISION?

Please refer to our Saturn and Vision disinfection notice available on simple request @ admin@landauer.co.uk.

> WHAT ARE THE TECHNICAL SPECIFICATIONS FOR VISION?

Please review the Vision product brochure for additional details.

> WHAT IS THE PART NUMBER (SKU) FOR VISION?

Vision uses the same TLD based sensor and the same part number (SKU) as a Saturn ring but the two products are differentiated by the place of wear. Note that the Vision product is for lens of eye dose monitoring only.

Online with myLDR.com

Our web based account management service enables you to:

- efficiently manage your entire dosimetry program online
- provide individual with access to their personal dose information
- go paperless (opt out of receiving paper dosimetry reports)

myLDR.com is offered at no charge to LANDAUER customers as part of our service.