



# Unfors DXR+

## Direct X-ray Ruler



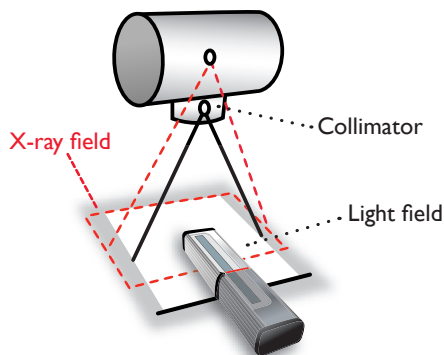
## X-ray/Light field alignment

**The new Unfors DXR+, Direct X-ray Ruler, represents the latest in today's technology for alignment of the light and radiation field.**

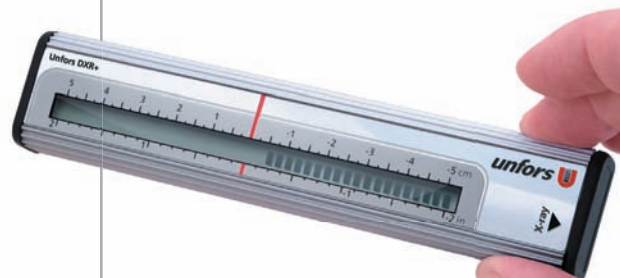
Traditionally screen-film cassettes have been used for X-ray/light field alignment measurements. The digitization of X-ray imaging makes this method obsolete as cassettes and film processors are often unavailable. The Unfors DXR+ provides you with an easy to use alternative to making these measurements.

The Unfors DXR+ is extremely easy to use as it is powered on by simply exposing the meter. Features include auto reset and auto power off. There is no need to adjust the light field to a square phantom before making an exposure. No time is wasted waiting for films to be developed.

The pocket-sized Unfors DXR+ operates down to 30 kVp and gives an objective, reproducible and immediate read-out.



- ✓ Fully automatic
- ✓ Radiographic & Mammo
- ✓ Ideal for digital imaging
- ✓ 6 - 8 years battery life



Expose the Unfors DXR+ and read the deviation in the display within seconds.

**"The Unfors DXR+ allows for quick checks with little effort"**

## Quick checks

International regulations recommends that the radiation and light field should be aligned within 2 % of the SID or even  $\pm 5$  mm at the chest wall for mammo. The Unfors DXR+ sensor array has been specially designed to meet the needs of real-time checks of the light and radiation field alignment on radiographic and mammographic X-ray equipment. The characteristics of the sensors provide an accurate and instantaneous result where adjustment is needed. A metric scale on the Unfors DXR+ PCB is visible on the X-ray image.

## Specifications Unfors DXR+


### General

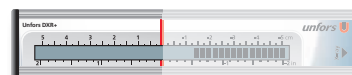
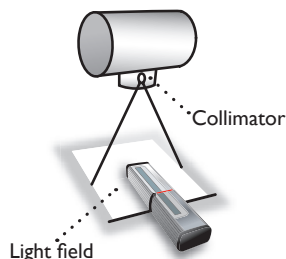
<b>Range</b>	$\pm 5$ cm or $\pm 2$ in
<b>Segment sensors/read out</b>	41 solid state sensors and corresponding LCD display segments
<b>Segment resolution</b>	0.25 cm 0.1 in
<b>Function test</b>	All segments should turn on when the Unfors DXR+ is fully irradiated.
<b>Minimum exposure</b>	50 mA and 10 ms @ 70 kVp, 100 cm
<b>Power on</b>	Automatic when exposed
<b>Power off</b>	Automatic after 1 min of inactivity
<b>Reset</b>	Automatic
<b>Battery life time</b>	6 - 8 years (CR1632) based on 2000 exposures per year
<b>Operating temperature</b>	10 - 40°C 50 - 104°F
<b>Storage temperature</b>	-20 - +60°C -4 - +140°F
<b>Size (H x W x L)</b>	15 x 30 x 145 mm, 0.59 x 1.18 x 5.71 in
<b>Weight</b>	75 gr, 2.6 oz

### Recommended Generator Settings

kVp	30	50	70	100
mA	>100	>200	>50	>50
SID cm	<65	<100	<100	<100
Exposure time	>10 ms			
No added tube filtration				

## 1. Position the Unfors DXR+

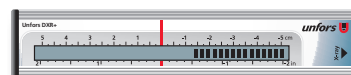
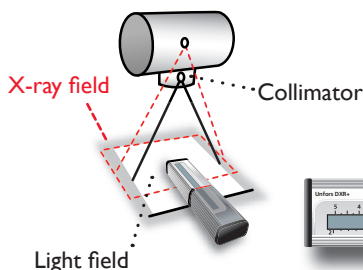
- Position the -symbol within the light field.
- Align the red center line with the light field edge.



The light field edge is aligned with the red center line.

## 2. Expose and read out

- Expose and read any X-ray/light field deviation in the Unfors DXR+ display.



The X-ray field is 1.2 cm (0.5 in) inside of the light field.

Adjust the collimator.

Swedish patent 526928.

Other patents pending.

All specifications may change without notice.

**unfors** 

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**The Unfors Concept**



Accurate result 10s to learn Pocket sized