RaySafe DXR+ An easy tool for X-ray/Light field alignment





RaySafe DXR+

The RaySafe DXR+, a 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 and light field alignment measurements. The digitalization of X-ray imaging makes this method obsolete as cassettes and film processors are often unavailable.) It is the ideal solution for performing most accurate measurements for radiography and mammography.



AN EASY-TO-USE INSTRUMENT

The RaySafe DXR+ is an easy-to-use instrument and the ideal solution for improving digital imaging in the radiographic and mammographic field. As soon as it is exposed to X-ray the RaySafe DXR+ is automatically switched on. 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 and no time is wasted waiting for films to be developed.

QUICK CHECKS

International regulations recommends that the radiation and light field should be aligned within 2% of the SID or even ± 5 mm at the chest wall for mammo. The pocket-sized RaySafe DXR+ enables an objective, reproducible and immediate read-out down to 30 kVp. The RaySafe DXR+ sensor array has been specially designed to meet the needs of real-time radiographic and mammographic X-ray equipment. The sensor provides an accurate and instantaneous result it and therefore indicates where adjustment is needed. A metric scale on the RaySafe DXR+ PCB is visible on the X-ray image.

How it works

1. POSITION THE RAYSAFE DXR+

Position the Description of the light field. Align the center line with the light field edge.





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

2. EXPOSE

Expose the RaySafe DXR+ to X-ray or light.





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

3. READ OUT

Read any X-ray or light field deviation in the RaySafe DXR+ display.

SPECIFICATIONS

RANGE	± 5 cm (± 2 in)		
SEGMENT SENSORS/ READ OUT	41 solid state sensors and corresponding LCD display segments		
SEGMENT RESOLUTION	0.25 cm (0.1 in)		
FUNCTION TEST	All segments should turn on when the RaySafe DXR+ is fully irradiated.		
POWER ON	Automatic when exposed		
POWER OFF	Automatic after 1 min of inactivity		
RESET	Automatic		
BATTERY LIFE TIME	6 – 8 years (CR1632) based on 2000 exposures per year		
OPERATING TEMPERATURE	10 – 40°C (50 – 104°F)		
STORAGE TEMPERATURE	-20-+60°C (-4-+140°F)		
SIZE (H x W x L)	15 x 30 x 145 mm (0.59 x 1.18 x 5.71 in)		
WEIGHT	75 gr (2.6 oz)		

RECOMMENDED GENERATOR SETTINGS

	МАММО	RADIOGRAPHIC		
kVp	Max	50	70	100
mA	>100	>200	>100	>50
SID (cm)	<65	<100	<100	<100

Exposure time: >10 ms No added tube filtration

All specifications may change without notice. Swedish patent 526928. American patent 7313223.



