INDIRECT DIGITAL SENSORS

Phosphor Plates

Surface marking

There is a topcoat on the plate that is easily marked by any form of rough handling. All staff who handle them should be aware that they must not bend or scratch them even normal handling can damage the surface

There is a type of mat that resembles bubble wrap which the plate can be placed on prior and post processing allowing the plate to be lifted off the surface without scratching over a work surface

The serial no should be taken and regular checks should be done (tiny flash exposure) to monitor marks , no step wedge. Each surgery should be responsible for their own plates.

Limiting fogging

As the plates are very sensitive to radiation even daily background radiation can base fog them....plate should be cleared on a light box every day before use for a few minutes....if done in the morning the plate should be fine till the end of the working day. Cling film can be stretched over the viewing box before placing the sensors, blue side down, onto the surface of the box to clear. This allows the cling film to be lifted off with the sensors safely inside the cling film, the sensors will not therefore be scratched when being slid or lifted off the box. Or the sensors can be cleared first thing every morning in the scanner, no exposure beforehand.

Sensor Positioning

There is a sensor waterproof cover that is gray –white coloured that can be used in the mouth rather than the black ones …this is much more easily seen in the mouth than the black one (more the colour of a normal emulsion film packet) to enable precise positioning. When positioning the sensor in the bite block it can sometimes slide as it is not as thick as a film packet …thicken with a white cardboard bitewing tab which will also double as a" target" when checking the position of the sensor in the mouth before aligning with the spacer cone

Ensuring captured image stays captured

When taking the radiographs the room blinds should be closed and the lights dimmed also light boxes should not be on

When taking the sensors to the scanner after exposure they should be protected from white light

As the image is cleared in the scanner by light the plate should be kept as dark as possible when image capturing and before scanning. The exposed plate should be kept in a light tight box prior to scanning and the scanner should be positioned in a dim room away from bright lights to enable plates to be loaded without losing image quality

Exposure settings

Phosphor plates have a wide exposure latitude, this means that they can give the same result when using a number of different exposures, unlike normal emulsion films which will be too pale or too dark if the exposure is changed. Their will have to be a number of test images taken to ascertain the lowest exposure that gives an acceptable enhanced image and this will become the maximum exposure for that area