

Instinct for perfection...



winct for movement



X-Mind tubes are located at the back of the head which gives the patient better protection because the distance between the focal spot and the skin is 50% greater than in traditional configurations.

The way leakage radiation is filtered (equivalent to 2mm A1 at 70kV) and controlled (less than 0.25mGy/h at 1m from focal spot) also gives maximum protection to the practitioner and personnel. The control button fitted with a safety system and exposure time control pre-defined by microprocessor ensure that a constant dose is administered to the patient. This technology avoids having to retake X-rays in the case of under-or over-exposure.

The X-Mind range pantograph arms provide great flexibility of use and accurate positioning.

The new, light alloy mechanism has smooth contours and protective casing at the joints.

It is easy to keep clean and can be decontaminated in compliance with the strictest demands of asepsis in dental practice.

Three extension arms are available (wall mounting): 41cm (16.2"), 82.5cm (32.5") and 110cm (43.5"), giving reaches respectively of 143cm, 184cm and 212cm (with a long cone).

The numerous control systems make X-Mind AC and DC very safe to use: self-diagnosis of control panel elements each time it is started up, check of the electric installation parameters by the timer and automatic compensation of the exposure time depending on variations in mains voltage ensure very high quality performance.

vitelligence too

Although the equipment has been preprogrammed at the factory all exposure times can be customised or programmed; furthermore, one button allows you to switch instantly from conventional intra-oral X-ray film to digital sensors, in order to meet the dental practitioner's needs in the most flexible manner possible (the default settings can easily be reinstalled at any time).

# ...intelligence too

whinch for ergonomics

inct for reliability

X-Mind AC and DC generators are recognised for their reliability and consistent performance.

Their "double chamber" light alloy heads are designed in one piece: the tube is in one chamber and the electronic components in another compartment in an oil bath (operating temperature regulation and high electrical insulation coefficient).

The control software automatically compensates for variations in mains voltage, the radiation emitted is always of the best quality to provide pictures with reproducible parameters.

The patented timer uses new technology which enables it to recognise automatically the type of generator and therefore to control an AC or DC X-Mind model, with their specific command options (the X-Mind timer can be connected to two AC and/or DC generators at the same time). The clearly organised commands make programming the X-rays easy thanks to the pictograms.

The type of patient, the type of films or even special X-rays are easily managed. Exposure times can be customised and programmed.

The electronics programme, which is compatible with both types of generator, enables the exposure time and radiation absorption to be reduced. The control panel manages exposure times that are perfectly suited to digital imaging with X-Mind DC (from 0.02 to 3.2 sec. in 23 stages). Using digital sensors reduces the exposure time by 75% compared with conventional intra-oral X-ray film.

inct for speed

The X-Mind AC version has an exposure time optimised for use with the latest generation conventional intra-oral X-ray films (type "F"), while being compatible with some digital sensors (from 0.08 to 3.2 sec. in 17 stages). Using "F" type films reduces radiation by 60% compared with "D" type films.





immediately from conventional intra-oral 31cm (12") long cone, head X-ray to digital X-ray. Pre-programmed keys rotates through 395°. for special pictures.

X-Mind DC exposure times are optimised for use with digital sensors. The generator is compatible with practically all digital imaging systems.

Polycarbonate locating cone: 0.7mm focal length for precise pictures, 31cm distance between skin and focal spot for better protection.







# X-Mind DC

The new X-Mind DC generator is fitted with a Toshiba DG-073B-DC double anode tungsten tube (intensity of 4mA and 8mA), it generates a constant voltage of 60kV or 70kV. It operates at high frequencies and constant potential which enables very high quality radiation to be emitted, whatever the conditions of use.

The choice of voltage (60 or 70kV) and intensity (4 or 8mA) enables optimal diagnosis of intraoral X-rays with a 35% reduction in exposure time, compared with monophased units.

The timer can control up to two DC generators. The extremely short exposure times (minimum 0.02 sec.) are suitable for digital radiology with CCD, CMOS or phosphor plate sensors (radiation is 50% less that that used with "E" type films).

Three wall-mounting extensions are possible for two installation types. An arm extension for fitting to the chair, on a column or to the ceiling and a mobile version, are available as options.









## X-Mind AC

The new X-Mind AC generator is fitted with a Toshiba DG-073B monophased auto rectifier tube. It generates a high 70kV voltage with an ideal intensity of 8mA. Concentrated, high density radiation in a very small diameter focal spot (0.7mm) for greater accuracy. Supplied with a long cone as standard, the generator is perfectly suited to the parallel technique (a short cone\* and a rectangular cone are available as options).

The rays emitted have a large wavelength and provide pictures characterised by a widespread grey scale for better distinction of anatomical detail.

The new timer is programmed for use with "D", "E" or "F" type films. It can be installed remotely and can control one or two units whatever the technology: AC + AC or AC + DC.

Which makes the X-Mind concept unique, probably giving it the best flexibility of use in intra-oral radiography.



X-Mind generators are fitted with long cones recommended for the parallel technique\*\*. A short cone\* for the bisector technique or a rectangular\*\* cone that reduces the rays applied to the patient's skin by 50%, are available as options.

Rectangular cone\*\* (44 x 35mm).

Short cone\* 20cm (8").



### X-Mind AC

Classification: Electromedical equipment, Class 1 type B Supply voltage: 220/230/240V~ - monophase 50/60Hz

Power absorption at 230V: 0.8kVA Resistance of the line:  $0.5\Omega$ 

X-ray tube: New Toshiba DG 073B tube

High voltage: 70kV Anode current: 8mA Focal spot: 0.7mm

Total filtration: Equivalent to 2mm Al at 70kV

**Tube inherent filtration:** Equivalent to 0.8mm Al at 70kV

Leakage radiation: Less than 0.25mGy/hour maximum at a distance

of 1m from focal spot

Long cone: Focus to cylinder tip distance = 31cm (12")
Timer: Exposure time can be set from 0.08 to 3.2 seconds
X-ray emission control: "Dead man" switch with 3m spiral cable

Total weight: 28kg (weight of the head: 9kg)

Manufactured in compliance with currently applicable regulations

and standards (EC Directive 93/42/EEC)

## X-Mind DC

Classification: Electromedical equipment, Class 1 type B

Supply voltage: 230V~ - monophase 50/60Hz

Power absorption at 230V: 1.4kVA Resistance of the line:  $0.5\Omega$ 

X-ray tube: New Toshiba DG 073B DC tube

High voltage: 60-70kV Anode current: 4-8mA Focal spot: 0.7mm

Total filtration: Equivalent to 2mm Al at 70kV

Tube inherent filtration: Equivalent to 0.8mm Al at 70kV

Leakage radiation: Less than 0.25mGy/hour maximum at a distance

of 1m from focal spot

Long cone: Focus to cylinder tip distance = 31cm (12")
Timer: Exposure time can be set from 0.02 to 3.2 seconds
X-ray emission control: "Dead man" switch with 3m spiral cable

**Total weight:** 25kg (weight of the head: 5.5kg)

 ${\it Manufactured in compliance with currently applicable \ regulations}$ 

and standards (EC Directive 93/42/EEC)

#### **OPTIONAL EQUIPMENT**

Short cone\*: Focus to cylinder tip distance = 20cm (8")

Rectangular cone\*\*: Cross section 44x35mm; Length = 31cm (12")

Wall-mounting arm: 0.40m or 1.10m

Ceiling arm Unit arm Mobile

**Inverted wall mounting:** 0.40m or 0.80m or 1.10m Second control button with extension cord RX indicator light for external use

\*short cone not available in the UK.

\*\*In line with NRPB recommandations the rectangular cone is supplied as standard in the UK.

