



X MIND  
Instinct for perfection

# X MIND™ Instinct for perfection



## INSTINCT 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.



## INSTINCT FOR ERGONOMICS

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.



## INSTINCT FOR SPEED

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.

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.



# X MIND DC

The new X-Mind DC generator is fitted with a Toshiba DG-073B-DC double anode tungsten tube (intensity of 4 mA and 8 mA), it generates a constant voltage of 60 kV or 70 kV. 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 70 kV) and intensity (4 or 8 mA) 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 than that used with "E" type films).



Rectangular cone (44 x 35 mm).

Short cone 20 cm (8").

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.



31 cm (12") long cone,  
rotates through 395°.

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



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

X-Mind timer : microprocessor-controlled, exposure time can be customised and programmed, one key allows you to switch immediately from conventional intra-oral X-ray to digital X-ray. Pre-programmed keys for special pictures.



## INSTINCT FOR PROTECTION

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 2 mm Al at 70 kV) and controlled (less than 0.25 mGy/h at 1 m 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.**



## INSTINCT FOR MOVEMENT

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): 41 cm (16.2"), 82.5 cm (32.5") and 110 cm (43.5"), giving reaches respectively of 143 cm, 184 cm and 212 cm (with a long cone).



## INTELLIGENCE TOO

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.

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).

# X MIND

## TECHNICAL CHARACTERISTICS

### X MIND AC

Classification .....	Electromedical equipment, Class 1 type B
Supply voltage .....	220/230/240 V - monophase 50/60 Hz
Power absorption at 230 V .....	0.8 kVA
Resistance of the line .....	0.5 Ω
X-ray tube .....	New Toshiba DG 073B tube
High voltage .....	70 kV
Anode current.....	8 mA
Focal spot .....	0.7 mm
Total filtration.....	Equivalent to 2 mm Al at 70 kV
Tube inherent filtration .....	Equivalent to 0.8 mm Al at 70 kV
Leakage radiation .....	Less than 0.25 mGy/hour maximum
.....	at a distance of 1 m from focal spot
Long cone .....	Focus to cylinder tip distance = 31 cm (12")
Timer .....	Exposure time can be set from 0.08 to 3.2 seconds
X-ray emission control .....	"Dead man" switch with 3 m spiral cable
Weight of the head.....	9 kg
Total weight .....	28 kg

### X MIND DC

Classification .....	Electromedical equipment, Class 1 type B
Supply voltage .....	230 V - 50/60 Hz
Power absorption at 230 V .....	1.4 kVA
Resistance of the line .....	0.5 Ω
X-ray tube .....	New Toshiba DG 073B tube
High voltage .....	60-70 kV
Anode current .....	4-8 mA
Focal spot .....	0.7 mm
Total filtration.....	Equivalent to 2 mm Al at 70 kV
Tube inherent filtration .....	Equivalent to 0.8 mm Al at 70 kV
Leakage radiation .....	Less than 0.25 mGy/hour maximum
.....	at a distance of 1 m from focal spot
Long cone .....	Focus to cylinder tip distance = 31 cm (12")
Timer .....	Exposure time can be set from 0.02 to 3.2 seconds
X-ray emission control .....	"Dead man" switch with 3 m spiral cable
Weight of the head .....	5.5 kg
Total weight .....	25 kg

*Manufactured in compliance with currently applicable regulations and standards (EC Directive 93/42/EEC)*

## OPTIONAL EQUIPMENT

Short cone.....	Focus to cylinder tip distance = 20 cm (8")
Rectangular cone .....	Cross section 44x35 mm; length = 31 cm (12")
Wall-mounting arm.....	0.40 m or 0.80 m or 1.10 m
Ceiling arm .....	Ref. Faro Ø 35 mm - length 1.70 m or 1.30 m
Unit arm .....	Ref. Faro Ø 60 mm or Ø 50 mm
Mobile .....	Height 1.10 m, length 0.80 m, width 0.70 m
Inverted wall mounting .....	0.40 m or 0.80 m or 1.10 m

Second control button with extension cord  
RX indicator light for external use

## ALSO AVAILABLE

