

Radchex/AEC

Model 07-RCX

- An intelligent meter that monitors daily quality control of the entire radiographic machine
- Convenient, fast, and accurate assessment of the AEC Systems' performance
- Separates x-ray machine from film processing quality control
- For AEC mammography applications, see Mamchex/AEC (Model 07-MCX)

Features

- Diagnostic power-up sequence to indicate operational status
- Manual reset using the Power/Reset button
- Automatic power-down when meter is not used for more than one minute
- Displays when an exposure is being made
- Displays exposure time in milliseconds
- Low battery indication

Introduction

Radiographic machines incorporating calibrated automatic exposure control (AEC) systems are designed to maintain constant film density regardless of the x-ray energy (kVp) used or patient thickness/density. The Radchex/AEC meter provides a convenient, fast, and accurate assessment of the performance of the AEC system and provides daily quality control of the entire radiographic machine.

Applications

The Radchex meter consists

of a calibrated electronic radiographic cassette that responds to radiation the same way a film/screen cassette responds to light from intensifying screens. No film is needed to determine the performance of the AEC system or daily quality control of the machine. If the AEC system is calibrated properly and the machine doesn't drift, then the digital number displayed by the Radchex meter should always be the same from day-to-day or for various x-ray energies or patient thickness.

To convert the Radchex number to an optical density number, software is provided for the conversion; however, in most cases this conversion is unnecessary since the Radchex number should remain constant when kVp and thickness changes.

When using the meter to assess AEC performance or daily machine quality control, no film/screen has to be used, therefore eliminating processing variations in the assessment.

The Radchex is easy to operate:

1. Slip Radchex into Bucky, same as the film/screen cassette, until it locks into place.
2. Turn on.
3. Push reset button, wait until the LCD says "Ready for Exposure."
4. Expose it.
5. Read the number and compare to a calibration number. The number tells whether the operator has a "go" or "no go" situation.



Specifications

Reset Manual using Power/Reset button

Operating temperature 59° to 95°F
(15° to 35°C)

Dynamic range 0 to 999.9

Power requirements Two 9 V batteries

Radiation exposure time accuracy
± 1 millisecc or 1% (whichever is greater)

Short/Long term drift < 0.5%

Typical battery life > 40 hr

Size 10.5 x 10.5 x 0.5 in (26.7 x 26.7 x 1.3 cm)

Weight 3.9 lb (1.8 kg)

Available model(s)

07-RCX Radchex/AEC, consists of M/R Interface and Radiographic Cassette

For more information, receive our full product catalog, or order online, contact **Radiation Management Services** business of **Fluke Biomedical**: 440.248.9300 or www.flukebiomedical.com/rms.

Specifications are subject to change without notice.

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