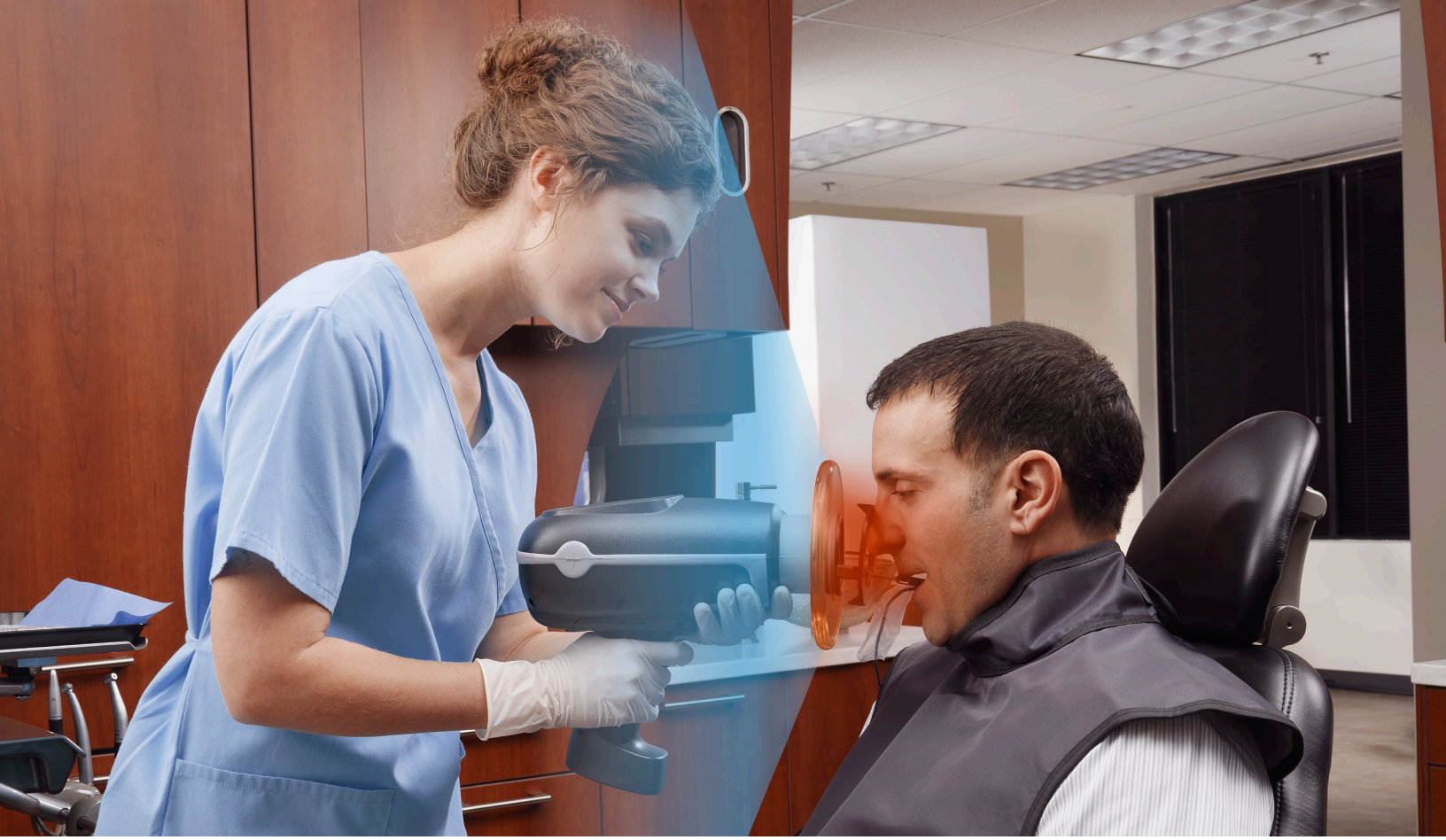
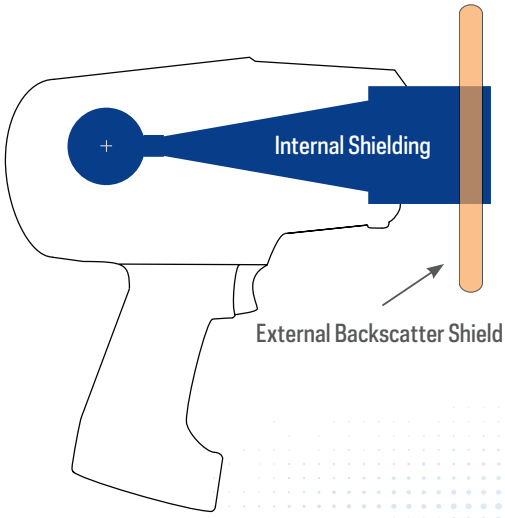


NOMAD™

Safe and Effective Handheld X-ray Technology*

Internal Shielding

Because of its innovative internal shielding, NOMAD Pro 2™ is safe for the operator to use handheld. The X-ray tube and collimator are completely enclosed in a proprietary blend of metals that work like lead to block radiation leakage.



Backscatter Shield

Most of the low-dose radiation generated by the NOMAD Pro 2 will be absorbed by the patient to take the X-ray, but in the case of backscatter radiation, the leaded polymer shield at the front of the device provides the operator with a zone of protection.

*The NOMAD is cleared to be safe and effective by the FDA. However, regulatory requirements can also vary in every jurisdiction. Please check with the regional regulators or Aribex for any necessary radiation authority variance required to operate NOMAD Pro 2. For indications for use, please visit www.aribex.com/ifu.

More than 30 independent studies and evaluations attest to the safety of the NOMAD Handheld X-ray Systems.*

> "The results of this comparison of dental staff doses between the NOMAD handheld intraoral X-ray system and conventional wall-mounted intraoral X-ray systems indicate that the staff doses for the handheld systems are significantly less than those for wall-mounted systems. Consequently, there should be no concern about the use of NOMAD handheld dental intraoral X-ray system." [1]

> "The NOMAD is a reliable, versatile, portable X-ray unit that meets radiation safety standards and has multiple applications for forensic, field, and humanitarian dentistry." [3]

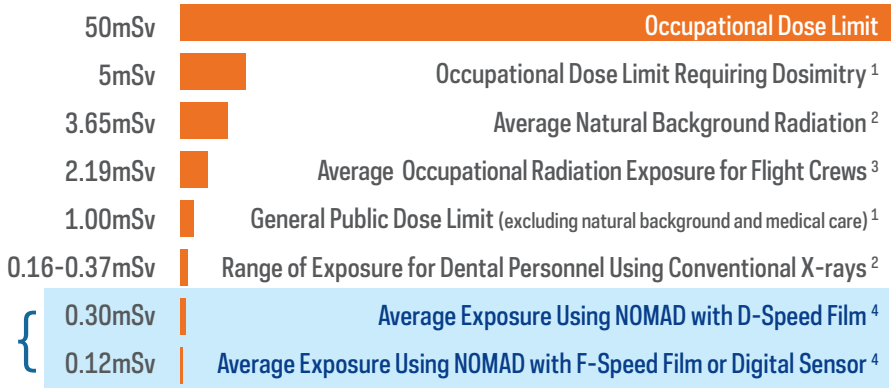
> "Our data have shown that the NOMAD presents risks that are no greater than with standard dental radiographic units to the patient or operator and the measured doses are well below recommended levels." [2]

> "This investigation suggests that the NOMAD hand-held X-ray unit employed in this study is suitable for use in routine dental radiography provided it is operated according to the recommendations of the manufacturer by properly trained personnel. This conclusion is supported by measurements of the dose received by a simulated operator." [4]

[1] Gray J, Bailey E, Ludlow J. Dental Staff Doses With Handheld Dental Intraoral X-ray Units. *Health Physics*, 2012; 102(2): 137–142.
[2] Goren A, Bonveto, M, Biernacki J, Colosi D. Radiation Exposure with the NOMAD Portable X-ray System, *Dentomaxillofacial Radiology*, 2008; 37: 109–112.
[3] United States Air Force, NOMAD™ Portable X-ray Unit (Project 05-40), Dental Evaluation & Consultation Service. Illinois: USAFSAM: 2006.
[4] McGiff T, Danforth R, Herschaft E. Maintaining Radiation Exposures As Low As Reasonably Achievable (ALARA) for Dental Personnel Operating Portable Handheld X-ray Equipment, *Health Physics*, 2012; 103(2): S179–S185.
*For more studies and information, visit www.aribex.com/safety-reference-list. Emphasis added in all quotes.

Comparative Data For Whole Body Exposure (Annual)

NOMAD PRO 2™



[1] Standards for Protection Against Radiation, 10 CFR 20 (US Federal Standards), 1994 (see also NCRP Report No. 116)
[2] NCRP Report No. 160 (National Council on Radiation Protection and Measurements): 211 – 212.
[3] "Estimated Cosmic Radiation Doses for Flight Personnel," Feng YF et al, Space Medicine and Medical Engineering, 15 (4) 2002: 265 – 269.
[4] Normalized average assumes 7,200 exposures per year, and the average length of exposure for D-speed=0.50 seconds, F-speed=0.25 seconds, digital sensor=0.20 seconds