

X-Ray Technician Digital Authorization Application

Last Name (as shown on your current permit)	First Name (as shown on your current permit)	Middle Name
Limited Permit Number (required) (as shown on your current permit)		Phone Number

The information on this form may be provided to federal, state, or local agencies for law enforcement purposes. For information or access to your records, contact the Chief of the Certification Unit at the California Department of Public Health, Radiologic Health Branch, MS 7610, P.O. Box 997414, Sacramento, CA 95899-7414, (916) 327-5106.

Use this application only if you hold a current and valid limited permit and are applying for authorization to use digital X-ray equipment within the scope of your limited permit category. If you hold a permit in the X-ray Bone Densitometry (XBD) or Dental Laboratory Radiography (DLR) permit categories, you are already authorized to use digital X-ray equipment within the scope of your XBD or DLR permit category and do not need to apply unless you hold other permit categories.

Complete and return this form along with documentation indicating completion of the following required instruction in digital radiologic technology, from an acceptable provider (see below), which shall be no less than 20 hours in length and shall include all of the following:

- (1) Basic principles of digital radiography addressing digital image characteristics, types of digital receptors in cassette-less systems and cassette-based systems, comparison of detector properties and evaluative criteria, and dynamic range versus latitude;
- (2) Image acquisition addressing raw data acquisition, and image extraction and exposure indicators in cassette-less and cassette-based systems;
- (3) Image acquisition errors addressing exposure field recognition, histogram analysis error, low intensity radiation response, scatter control such as coning and use of optimal exposures, and grid use including Moiré effect;
- (4) Software (default) image processing addressing automatic rescaling, final image processing, effects of excessive processing, and recognition of image processing errors that affect image clarity;
- (5) Fundamental principles of exposure addressing optimal receptor exposure, receptor response and detective quantum efficiency, selection of exposure factors, exposure myths associated with digital imaging systems, controlling patient exposure, monitoring patient exposure;
- (6) Image evaluation addressing evidence of appropriate exposure level and exposure recognition failure or histogram analysis error, contrast, recorded detail, and artifacts;
- (7) Quality assurance and maintenance issues addressing initial acceptance testing, cassette-based system reader preventive maintenance, plate maintenance, uniformity of default processing codes, and reject analysis; and
- (8) Image display issues to include types of viewing monitors as compared to film/screen, picture archiving and communication systems, teleradiology, and operator responsibilities such as image annotation and manipulation, and patient confidentiality.

Acceptable Providers: (1) Diagnostic radiologic technology schools whose digital instruction has been approved by CDPH; OR (2) Limited permit X-ray technician schools whose digital instruction has been approved by CDPH; OR (3) Providers whose continuing education activity pertaining to the above instruction is designated as "Category A" credit by an organization approved by the American Registry of Radiologic Technologists as a Recognized Continuing Education Evaluation Mechanism.

I certify that the information provided with this application is true and correct. I understand that the California Department of Public Health may revoke permits and authorizations that are procured by fraud, misrepresentation, or mistake. Further, I am aware that it is unlawful to use digital X-ray equipment unless I have been authorized pursuant to title 17, California Code of Regulations, section 30410.

Signature	Date
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Mail completed application and documentation to: Registration & Certification Support Unit – Digital California Department of Public Health Radiologic Health Branch, MS 7610 P.O. Box 997414 Sacramento, CA 95899-7414	OR Fax completed application and documentation to: (916) 341-6917 (only fax X-ray Technician Digital Authorization Application and documentation)
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!! AUTHORIZATION NOTIFICATION !!

If your application is complete, a notice of completed application will be mailed to you stating how to obtain the authorization document at www.cdph.ca.gov. Click on Programs, go to "R" (A-Z Index), go to Radiologic Health Branch, go to Permits/Certificate Names Search Tool. Prompts will assist you. If the information indicates you have been authorized, print that page, which IS YOUR TEMPORARY AUTHORIZATION. *That page shall be posted at every facility where you take X-rays and shall be presented to any CDPH inspector upon request.* Please allow 45 days for receipt of the official permit indicating digital radiography is authorized.