



# PACS Scan Mobile

## User Help

LX-DOC-PSM3.0-UH-EN-REVA

## Regulations and Compliance

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## Symbols used in this document



CE marking of conformity

The device is in conformity with the applicable requirements set out in this EU Medical Device Regulation and other applicable Union harmonization legislation.



ISO 7000:3500 - Electronic Instructions For Use

To indicate on product or product packaging that relevant information for use of the product is available in electronic form rather than, or in addition to, printed paper form.



ISO 7000:3082 - Manufacturer

To identify the manufacturer of a product.



ISO 7000: 0434B – Caution

To indicate that caution is necessary when operating the device or control close to where the symbol is placed, or to indicate that the current situation needs operator awareness or operator action in order to avoid undesirable consequences.

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## What is PACS Scan Mobile?

The PACS Scan Mobile client is an iOS application for mobile devices that allows you to easily capture images and videos and then send them to patient studies on DICOM archives. With proper authorization, you can query and retrieve a patient study from a worklist or create a new patient record. You can take photos and videos. You can manipulate photos, for example, crop or rotate, and also annotate them prior to sending to other locations. You cannot alter videos prior to sending. You can delete unwanted images and videos prior to sending.

## Intended use

PACS Scan Mobile is intended to be used by authorized staff to perform various operations on imaging studies before they are made available to other locations in the network. These operations include capturing images, capturing video images, confirming or editing patient demographics. Typical users of the PACS Scan Mobile application are trained medical professionals, including but not limited to clinicians, technologists, assistants, and lay persons with guidance from the care giver. PACS Scan Mobile is not intended for diagnostic use. Lay persons can use PACS Scan Mobile to capture images and videos with the assistance of their healthcare provider.

## General precautions



The following is a list of general precautions that you must follow before using PACS Scan Mobile.

- Follow the instructions in this document to ensure the best outcome using PACS Scan Mobile 3.0 Augmented Reality (AR) Measurement Mode and other features.
- Non-professionals and patients should consult with their caregiver for proper use before using AR Measurement Mode.
- Avoid holding the camera in a motion position that may affect the capture of still objects taken in AR Measurement Mode.
- Avoid taking pictures in light sensitive areas. For best quality pictures, inspect surrounding lighting conditions.
- Inspect images you take of skin surface for possible glare, obstruction and color effect. If a change in skin is observed, consult your caregiver.
- You cannot save images and videos taken on your mobile device.
- Non-professional users or patients should contact the caregiver for advice on sending images to the healthcare institution. If you cannot send or upload images during use, notify your caregiver immediately.

## Change the current department

PACS Scan Mobile uses the application entity (AE) destinations, query sources, and devices configured for the current department by your administrator. You can change the current department, but note that all current images and data are lost. To change the current department, complete the following steps.

1. Tap menu .
2. On the **Menu** screen, under **Department**, tap the name of the current department.

3. In the **Select Department** list, tap the name of the department that you want to select.

## Use PACS Scan Mobile

### Load patient records

#### Find a patient by query

To find an existing patient study from a configured source, complete the following steps.


1. On the main screen, under **Query Source**, select a source and tap **Done**.
2. Under **Patient**, enter all or part of the last name or exact MRN to use as search criteria.

**Example** For example, in the **Last name** box, type **c** to query patients whose last names begin with the letter **c**.

3. Tap **Search**.
4. On the **Patient Lookup** screen, scroll through the list of query results to find your patient's record.
5. Tap the patient record to display associated studies and tap a study.
6. Optional. To add information, see "Add description and flag for confidentiality."
7. Tap **Next**.
8. To modify the study, see topics under "Modify and send studies."

#### Retrieve a patient record from a barcode

If a barcode is attached to a patient or physical media, you can retrieve the patient record by scanning the barcode with your mobile device. To retrieve a patient record from a barcode, complete the following steps.

1. On the main screen, in the upper right corner, tap the barcode  button.  
The camera of the mobile device turns on.
2. Point the mobile device to center the barcode in the brackets.  
The patient record appears in the main screen.
3. Optional. To add information, see "Add description and flag for confidentiality."
4. Tap **Next**.
5. To modify the study, see topics under "Modify and send studies."

#### Create a patient record

To create a new patient record, complete the following steps.

1. On the main screen, under **Query Source**, tap the select a source, and then tap **Done**.
2. Under **Patient**, enter the MRN and patient last name (required), and any other information that you want to include in the patient demographic fields.
3. Optional. To add information, see Add description and flag for confidentiality.
4. Tap **Next**.
5. To modify the study, see topics under Modify studies.

## Add a description and flag for confidentiality

After loading a study, before working with images and video, you can add a series description. If you are sending to an XDS destination, you can also flag the study as confidential. To add a description and flag for confidentiality, complete the following steps.



1. To add a description to the study, at the bottom of the main screen, under **Series Description**, select a description from the list, and then tap **Done**.
2. To flag the study as confidential, tap **Confidential**.
3. Tap **Next**.

## Modify and send studies

### Capture images and video

**Prerequisite** Before you can capture videos, your administrator must turn on video capture. See "Add a department" in the PACSgear Core Server user's manual.

To capture an image or video to attach to a patient study, complete the following steps.


1. Find a patient and tap **Next**.  
The camera of the mobile device turns on.
2. To capture images, complete the following substeps.
  1. At the top of the capture screen, tap **Photo**.
  2. Optional. To zoom in or out, pinch or spread the screen.
  3. To capture one or more images, aim the camera and tap the circle .
3. To capture videos, complete the following substeps.
  1. At the top of the capture screen, tap **Video**.
  2. Rotate your device to landscape orientation.
  3. Tap the circle  to start and stop recording.
4. When you are done capturing images and videos, tap **Next**.  
Thumbnails of the images and videos you capture appear on the send screen.

### Import images and videos from the camera roll




**Prerequisite** Before you can capture videos, your administrator must turn on video capture. See "Add a department" in the PACSgear Core Server user's manual.

If you capture images or video onto the camera roll of the mobile device, you can import them into a study. To import images and videos from the camera roll, complete the following steps.

1. Find a patient and tap **Next**.
2. On the capture screen, tap the import  button and tap **Photo** or **Video**.  
**Note:** If the "PACS Scan would like to access your photos" message appears, tap **OK**.
3. On the **Photos** screen, tap **Camera Roll**.
4. On the **Camera Roll** screen, tap a photo and tap **Choose**.





The program returns to the photo and video capture screen.

5. Optional. To import more photos or videos, tap import .
6. Tap **Next**.

Thumbnails of the images and videos you captured appear on the send screen.

## Edit or delete an image

You can edit images or delete them from the study before sending. To edit or delete an image, complete the following steps.


1. On the send screen, tap the image you want to edit or delete.
2. To delete the image, tap the trash  button.
3. To edit the image, refer to one or more of the following topics.
  - Crop an image
  - Specify the body part of an image
  - Annotate an image
  - Rotate an image
4. To undo all unsaved edits, tap the revert  button.
5. Tap **Save**.

**Note:** To save edits and delete images you must tap **Save**.

Thumbnails of the images and videos you retained appear on the send screen.


### Crop an image

You can remove unwanted portions of an image by cropping it. To crop an image, complete the following steps.

1. On the image editing screen, tap the crop  button.
2. To resize the crop boundary, drag a corner handle.
3. To move the crop boundary over the image, drag near the center of the boundary.
4. To crop the image at the crop boundary, tap **Crop**.


### Specify the body part of an image




You can apply standardized body part labels to an image. To specify the body part of an image, complete the following steps.

1. On the image editing screen, tap the body part  button.
2. Tap a body region and select a body part in the list.
3. To apply the body part to all images, turn on **Apply to all images**.
4. Tap **Apply**.

### Annotate an image


You can draw freehand marks or add a text description. To annotate an image, complete the following steps.

1. On the image editing screen, tap the draw  button.
2. To add text, complete the following substeps.

1. Tap the text **T** button.
2. In the **Enter Image Description** dialog box, type text and tap **OK**.
3. To draw on the image, complete the following substeps.
  1. On the left pane, tap a color.
  2. On the center pane, if drawing is disabled, enable it by turning on the switch.
  3. On the right pane, tap the light , medium , or heavy  marker and tap **Close**.
  4. Draw on the image.



## Rotate an image

You can rotate an image 90, 180, or 270 degrees clockwise. To rotate an image, complete the following steps.

1. On the image editing screen, to rotate the image 90 degrees, tap the rotate  button.
2. To rotate the image 180 or 270 degrees, tap the rotate button a second or third time.

## Edit or delete a video

You can edit videos, or delete them before sending. To edit or delete a video, complete the following steps.

1. On the send screen, tap the video you want to edit or delete.
2. To specify a body part for the video, complete the following substeps.
  1. Tap the body part  button.
  2. Tap a body region and select a body part in the list.
  3. To apply the body part to all videos, turn on **Apply to all**.
3. To delete the video, tap the trash  button.
4. Tap **Save**.

**Note:** To save edits and delete images you must tap **Save**.

Thumbnails of the images and videos you captured appear on the send screen.

## Send a study

After loading and modifying a study, you can send it to a PACS, VNA, or other archive available to your department. You must make at least one change to the study before sending it. To send a study, complete the following steps.

1. On the send screen, tap **Send**.
2. Select a destination in the list.

**Note:** The study is sent immediately after you tap a destination.

## AR Measurement Mode

### What is AR Measurement Mode?

PACS Scan Mobile supports measuring real-world distances using Augmented Reality (AR)-enabled devices and capturing that measurement as an overlay on the captured image. Note that AR measurements are only taken on still images and not videos.

### Requirements

#### iOS

AR Measurement Mode is only possible on iOS devices, versions 11 and later, that support the ARKit.

Device	Models
iPhone	<ul style="list-style-type: none"> <li>• X</li> <li>• 8 Plus</li> <li>• 8</li> <li>• SE</li> <li>• 7 Plus</li> <li>• 7</li> <li>• 6s Plus</li> <li>• 6s</li> </ul>
iPad	<ul style="list-style-type: none"> <li>• Pro (10.5", 12.9" and older models of 9.7"</li> <li>• 2017</li> </ul>

#### Android



Android does not currently support AR Measurement Mode.

### Use AR Measurement Mode



For proper use, non-professional users and patients must consult with their caregiver before using AR mode.


To use AR Measurement Mode, complete the following steps.

- In Camera mode, click Measure at the top of the screen. The system displays the following message, **Measuring the world** and the ARkit begins to setup and acquire an initial image of the world.



indicates that you are in Measurement mode.

## Result



When PACS Scan Mobile is ready to take real-world measurements, the system displays a target icon  in the center of the screen and the word NEXT in the bottom corner of the screen.

## Take a measurement




Lighting conditions, motion of the subject or camera, and the characteristics of the subject surface can all affect the accuracy of the measurement taken. PACS Scan Mobile AR Measurement Mode should be considered estimates and are not intended for diagnostic use.

To take a measurement, complete the following steps.

1. Center the target on the initial point or edge of the subject you want to measure.
2. Tap and hold your finger anywhere on the screen, except for the word **NEXT** or . The system sets the initial point and begins tracking your motion.
3. Move or rotate the phone while keeping your finger on the screen, so that the target is over the end point or far edge of the subject you want to measure. The system extends a line, in real time, from the initial point to where you are currently pointing, and the current length of that line as an annotation.  
You can take multiple measurements in the same capture session.
4. Tap  to take the picture.  
You may need to reposition the camera to view the beginning and end points at the same time. The system keeps the AR measurements in place as you move.
5. Tap **Next**. The system ends capture mode and takes you to the gallery of captured images and videos.

## Change units of measure

To change the units of measure, complete the following steps.

- Tap  at the top of the screen and then select the appropriate units of measure from the list.  
The units of measure you select only applies to measurements taken after the units of measure is changed. It is not retroactive to measurements already taken.

## Undo a measurement

To undo a measurement, complete the following steps.

- Tap **Reset** to delete all the measurements you have just taken.

# Manage jobs in PACS Scan Mobile

## What is a job?

A job is a collection of information about a send operation that is created when a user sends data to a DICOM device. This information includes such things as who sent the data, when, and from where. It also includes the job status, which is the result of the send operation.

You can view job history, or cancel or restart a failed job in either the PACS Scan Mobile app or PACSgear Core Server.

## View a job

To view a job, complete the following steps.

1. In PACS Scan Mobile, tap menu on the main screen, and then tap **Status**.
2. In the list of jobs, tap the failed job that you want to cancel.
3. Tap **Cancel**.


## Cancel a job

To cancel a failed job, complete the following steps.

1. In PACS Scan Mobile, tap menu on the main screen, and then tap **Status**.
2. In the list of jobs, tap the failed job that you want to cancel.
3. Tap **Cancel**.

## Restart a job

To restart a job, complete the following steps.

1. In PACS Scan Mobile, tap menu  on the main screen, and then tap **Status**.
2. In the list of jobs, tap the failed job that you want to restart.
3. Tap **Restart**.

The job is highlighted in yellow, and PACS Scan Mobile attempts to resend the job.