KAPREN Mobile

User manual — iPhone and Android

Online, always up to date: subscription.radpicsai.com/manual/mobile

KAPREN Mobile is the KAPREN DICOM viewer for iPhone and Android: open a study, scroll, measure, look at it in MPR or 3D, receive studies from a scanner, PACS or KAPREN desktop, and send them on. This manual covers version 1.2. The pictures are from Android; iPhone uses the same names, and the differences are noted.

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KAPREN is a viewing tool for trained staff. Always check measurements and findings against the original images.

Getting started

KAPREN Mobile uses your KAPREN subscription. The phone counts against your plan's mobile devices (phones and tablets), not its computers.

Install and sign in

1. Install KAPREN from the App Store or Google Play and open it.
2. Type the email address or mobile number of your subscription in **Email or mobile number** and tap **Sign in**.
3. Enter the code that arrives by email or WhatsApp in **Code** and tap **Verify**. **Send a new code** sends another; **Use a different account** starts again.

Start a free trial

1. On the sign-in screen tap **Start free trial**.
2. Fill in **Your name**, **Email address** and **Mobile number** (with the country code, e.g. +91 98765 43210).
3. Choose **WhatsApp** (the default) or **SMS** for the code, then enter it.

> **Note:** There is one free trial per device. A refused trial offers **Sign in instead**.

When all your mobile devices are in use

KAPREN shows the devices already on your plan, each with when it was last used, and a **Replace** button. The one you replace stops working at once.

Use KAPREN without a connection

After a successful check, KAPREN opens for up to 14 days without going online, never past your paid-through date. In the last 4 days the study list shows when your subscription ends. A study already open is never closed by a failed check.

Message	What it means
No subscription found	The email or number is not on a KAPREN subscription
Subscription expired / suspended	Renew it, or contact support
Not included in your plan	Your plan has no mobile devices
Cannot reach the subscription service	No connection; try again when online

Sign out or delete your account

Open **Settings › Account**. **Sign out of this device** frees the seat for another phone. **Delete my account** closes the account at once (after a code) and deletes it within 30 days. Studies on the phone stay until you delete them.

Studies on the phone

The study list is the first screen after sign-in. Every study you bring onto the phone is copied into KAPREN, so it is there next time.

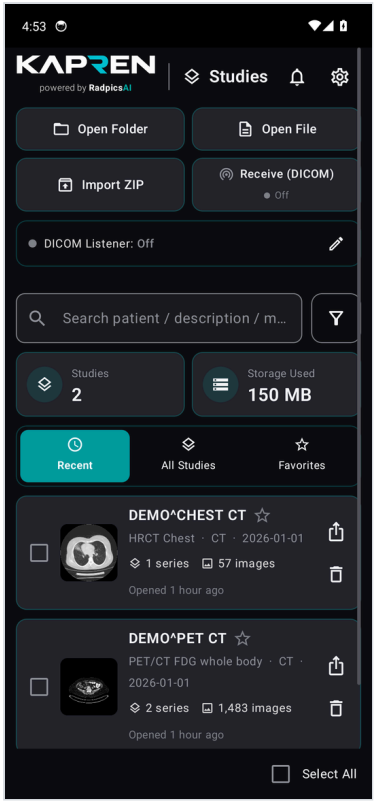


Figure 1. The study list on the phone.

Bring studies onto the phone

Button	Does
Open Folder	Pick a folder; the study opens at once while a copy goes into KAPREN
Open File	One DICOM file
Import ZIP	A zip of a study, imported and then opened
Receive (DICOM)	A scanner, PACS or KAPREN desktop sends to the phone (see Send and receive DICOM)

KAPREN says when a folder holds no DICOM images or some files could not be read. A study already on the phone comes in as a new row marked **Duplicate**.

Open a study from another app

Open a .dcm or .zip from Files, Mail, WhatsApp or Drive and choose KAPREN (iPhone: **Open in**, or AirDrop). KAPREN checks the file's content, not its name. If you are signed out, the file waits and is imported after you sign in.

Find a study

1. Choose **Recent** (studies you opened, newest first), **All Studies** or **Favorites**.
2. Type in the search box: patient, description, modality or study UID.
3. Tap the funnel to filter by **Modality** and **Study date** (Today, Last 7 days, Last 30 days), then **Apply**.
4. Tap a row to open the study. Tap its star to make it a favorite.

Each row shows the patient, description, modality, date and the number of series and images, and labels such as **Duplicate**, **From** a sender's AE title, **Received by Bluetooth** or **On server**.

Share, send or delete a study

- **Share as zip** (the icon on the row) makes a zip and opens the system share sheet.
- Long-press a row for **Add to Favorites**, **Send to PACS…**, **Sync to server**, **Share as zip** and **Delete from phone**.
- Tick several rows (or **Select All**) to **Send**, **Sync** or **Delete** them together.

> **Note: Delete from phone** removes only the phone's copy. The original files, and copies on your server or a PACS, are not touched.

Viewing images

The image fills the screen between two bars. The top bar is for the study: **Studies** (back), **Series**, **Keys** (when the study has key images), **Cine**, **MPR**, **3D**, **Plane**, **Presets**, **Clear** and **Tools**. The bottom toolbar sets what a finger does on the image.

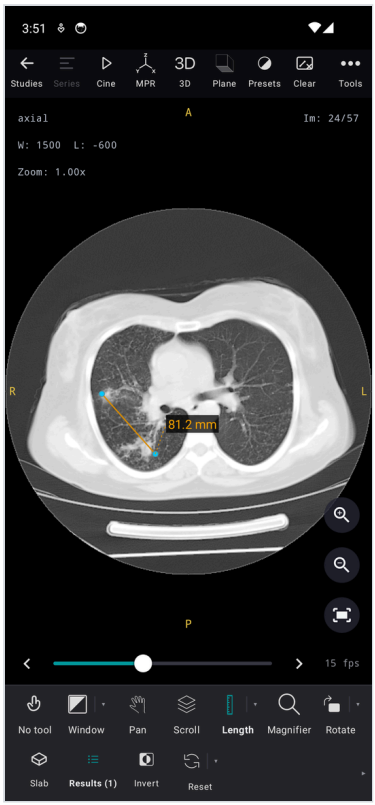


Figure 2. A chest CT in the lung window, with a length.

Open a study and choose a series

1. Tap a row on the study list. A study with images opens on the images; one with none opens its first PDF, report, ECG, video or slide.
2. Tap **Series** to show the series rail, then tap a series to load it. Each card shows its description, modality and number of images.
3. Tap **Series** again to hide the rail.

Scroll through images

- Drag the slider under the image, or tap ‹ / ›.
- Choose the **Scroll** tool and drag up or down on the image.
- Tap **Cine** to play the series. The **fps** button cycles 5, 10, 15, 24 and 30 images a second (15 by default).

Zoom, move and reset

- Pinch with two fingers to zoom (up to 8×) and move the image, whatever tool is chosen.

- Double-tap to reset the zoom.
- **Reset** on the toolbar puts back zoom, orientation and window.

Change the window and presets

1. Choose **Window** and drag across and up or down on the image.
2. Or tap **Presets** on the top bar: **Soft tissue** (400 / 40), **Lung** (1500 / −600), **Bone** (1500 / 300), **Brain** (80 / 40) or **Auto** (each image's own window).
3. **Invert grayscale** inverts the image; **Reset view** puts everything back.

The bottom toolbar

Tool	Does
No tool	Only pinch and tap; tap the active tool to turn it off
Window ▾	Drag to change the window; ▾ lists the presets with their values
Pan	Drag to move the image
Scroll	Drag up or down through the images
Length ▾	The measuring tools (see Measuring and annotating)
Magnifier	Hold on the image to magnify
Rotate ▾	A tap turns 90° right; ▾ turns left, flips, or resets
Slab	MIP 5, 10 or 15, MinIP 5 or AvgIP 5 slices (volumes only)
Results	The list of measurements
Invert	Inverts the grey scale
Reset ▾	Puts back zoom, orientation and window

> **Tip:** Press and hold any button to see its name and how to use it. **Tools › Toolbar** switches between two rows and one row.

Layouts and display options (Tools)

Tools holds the layouts (**1×1**, **1×2**, **2×2** when the study has several series, **MPR**), **Link viewports** (window and scroll together), **Loop cine**, **Localizer**, **Show warnings on images**, **Saved annotations**, **GPU rendering**, and **DICOM tags** (searchable).

Measuring and annotating

Draw a measurement

1. Tap the ▾ next to **Length** and choose a tool. The button then shows that tool.
2. Draw on the image as the table says. A short hint shows on the image when you pick a tool.

Tool	How
Length	Drag from one point to the other
Angle	Place one arm, the corner, then the other arm
CTR	Heart width, then chest width (cardiothoracic ratio)
Rectangle / **Ellipse**	Drag a box or oval: area, mean, min and max
Freehand	Draw round the area
Probe	Tap a point to read its value
Arrow	Tap where it points, then type its label

Change or delete a measurement

- Tap a measurement to select it.
- Long-press it for **Edit label** or **Delete**.
- **Clear** on the top bar removes every annotation on this series, after asking.

List and export measurements

Results lists every measurement. Tap one to go to its image, tap ✕ to delete it, **Export** saves them as a CSV file, and **Clear all** removes them.

> **Note:** Measurements on the phone are kept while the study is open; export them before you close it. Annotations saved by KAPREN desktop or another viewer show in green and cannot be changed or cleared on the phone; **Tools › Saved annotations** shows or hides them.

MPR, one plane and 3D

MPR, **3D** and **Plane** appear for a volume: a CT or MR series of many slices with reliable geometry. 3D also needs at least 8 slices and a phone whose graphics support it.

Read in three planes (MPR)

1. Tap **MPR**. Axial, coronal and sagittal panes appear with a crosshair.
2. Tap or drag to move the crosshair; the other panes follow.
3. Drag a crosshair handle to tilt the planes (oblique).
4. Double-tap a pane to fill the screen; double-tap again to go back.
5. **Reset** puts the planes and crosshair back; **Crosshair** shows or hides the lines. Tap **1×1** to leave MPR.

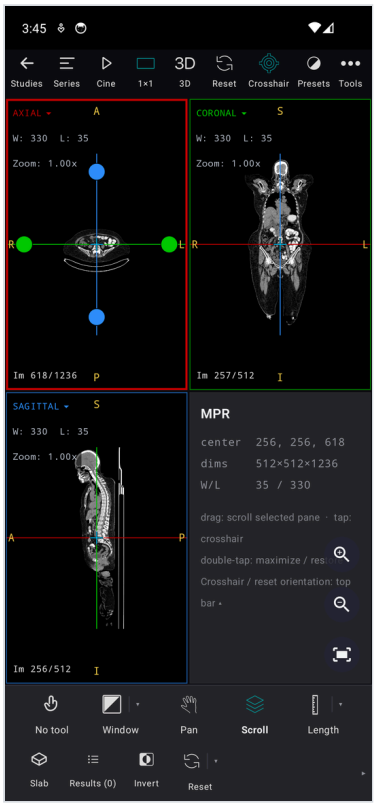


Figure 3. MPR: three planes and the crosshair.

> **Tip: Tools › MPR** sets the pane layout (**Quad**, **Stack** or **Focus**) and the crosshair size.

Show one plane on the whole screen

Tap **Plane** and choose **Axial**, **Coronal** or **Sagittal**. KAPREN names them from the scan's own geometry.

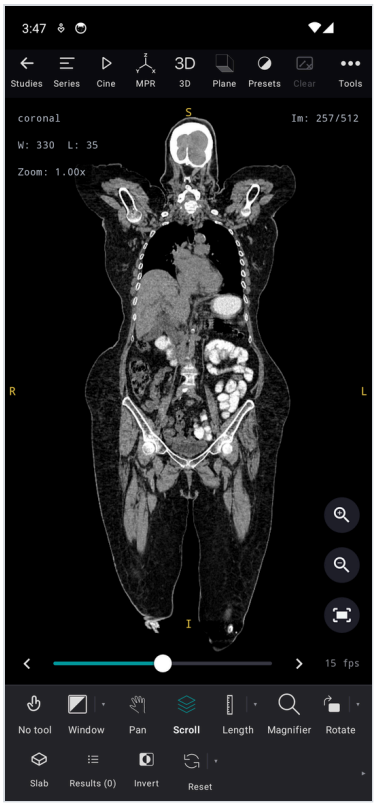


Figure 4. Plane › Coronal: one reformatted plane on the whole screen.

Look at the volume in 3D

1. Tap **3D**. One finger turns the volume; two fingers move and zoom.
2. Tap the mode to cycle **VRT**, **MIP** and **X-ray**.
3. Tap the preset name for another look; **Crop**, **Edges** and **Planes** change what is shown.
4. The view buttons **A P L R S I** turn it to face the front, back, left, right, top or bottom; **Reset** puts it back.

> **Note:** A dental cone-beam scan starts on **CBCT-Bone**, with **Tissues** sliders for soft tissue, bone, teeth and metal.

Key images, documents, ECG, video and slides

These open from the series rail and are for viewing.

Object	On the phone
Key images	The ★ **Keys** button lists them with their reason and note; tap one to open it
PDF	Every page fitted to the width, "Page n of N", pinch to zoom
Report (SR)	Shown as text you can select
ECG	Layouts 1×10 s, 2×5 s and 4×2.5 s with rhythm strips; speed and gain; **Caliper**, **QT**, **HR** and **Axis**
Video	Plays MP4 inside DICOM with a seek bar and loop
Whole-slide image	Pinch, pan and zoom with a scale bar; tap a fluorescence channel to turn it off and on

> **Note:** ECG measurements are not saved. Whole-slide images cannot be measured on the phone.

Send and receive DICOM

The phone is a DICOM node of its own. A scanner, a PACS or KAPREN desktop can send studies straight to it over Wi-Fi, and the phone can send studies on to a PACS or workstation. Both ends identify each other by three things:

Setting	What it is	The phone's default
AE title	The name a DICOM machine is known by	KAPREN
Address	The phone's IP address on the Wi-Fi	Shown under **Send studies to**
Port	The network door it listens on	11112

> **Note:** Phone and sender must be on the same network (or one that routes between them). A guest Wi-Fi that keeps devices apart will not work.

Receive studies on the phone

1. On the study list tap **Receive (DICOM)** (or **Settings › Receive**).
2. Turn on **Receive from machines (DICOM)**. It is off until you turn it on.
3. Read the address under **Send studies to**. Keep **Port** 11112 and **AE title** KAPREN unless your PACS needs others.
4. On the scanner, PACS or KAPREN desktop, add a destination with that AE title, address and port.
5. Tap **Test** on the phone. "Test passed — this phone answers at that address" means it is listening.
6. Send the study from the other machine. The phone shows **Receiving from** and the sender while it arrives, then files it.

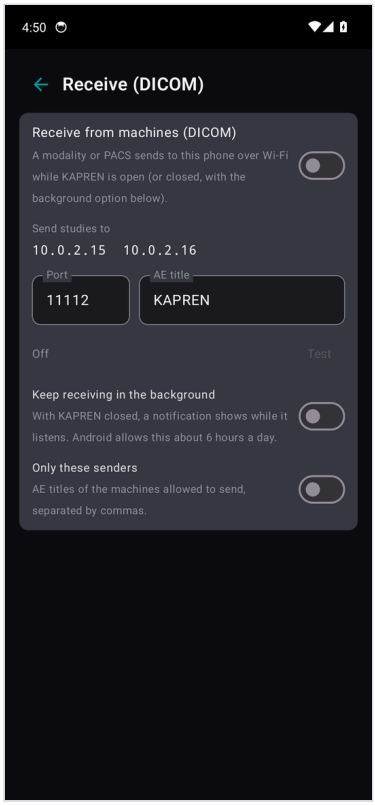


Figure 5. Receive (DICOM): address, port and AE title.

Received studies are added to the list marked **From** and the sender's AE title. The bell at the top shows a dot when something new has arrived; tap it to see what came in and open it.

Status line	Means
Off	The switch is off
Listening · N images received	Ready; N images have arrived since it started
Receiving from …	A study is arriving now
Not listening: …	It could not start; the reason follows (no Wi-Fi, port in use, network access denied)

Accept only machines you name

1. Turn on **Only these senders**.
2. In **Allowed senders** type the AE titles of the machines allowed to send, separated by commas (capitals and trailing spaces do not matter).
3. Any other sender is turned away, and the phone shows "Refused … — not on the list".

> **Note:** While the list is empty every sender is still accepted, so a typing slip cannot lock everyone out. **Test** checks the address only; it is not let past the list.

Keep receiving with KAPREN closed (Android)

Turn on **Keep receiving in the background**. A notification shows while it listens. Android allows this for about 6 hours a day, and it needs the notification permission (**Settings › App**).

On iPhone the phone receives while KAPREN is open and keeps the screen on while it listens. Allow **Local network** when iPhone asks, or nothing can reach it.

Send from KAPREN desktop to the phone

1. On the phone, turn on **Receive (DICOM)** and note the address.
2. In KAPREN desktop add a DICOM destination: AE title **KAPREN**, the phone's address, port **11112**. Use **Test** there too.
3. Send the study to that destination from KAPREN desktop as you would to any PACS.

> **Tip:** Without Wi-Fi, Android phones can take studies by Bluetooth (next task). On iPhone use AirDrop or **Share as zip** from the desktop.

Receive by Bluetooth (Android)

1. Open **Settings › Receive › Receive by Bluetooth** and turn it on.
2. Tap **Choose** and pick the folder your phone saves Bluetooth files in.
3. Send the study to the phone by Bluetooth (from KAPREN desktop: **Send by Bluetooth…**).
4. With KAPREN open, it moves the study in and marks it **Received by Bluetooth**.

> **Note:** Files already in the folder when you turn it on are left alone. If your phone saves Bluetooth files straight into Download, open them from the Bluetooth notification with KAPREN instead.

Add a send destination

1. Open **Settings › Send** and tap **+ Add destination**.
2. Enter a **Name** people will recognise (e.g. Hospital PACS), the destination's **AE title**, its **Host or IP address** and **Port** (104 by default), then **Save**.
3. Tap **Test** beside it. **Answered** means it accepted the phone; otherwise the reason is shown.
4. **Edit** changes or deletes it.

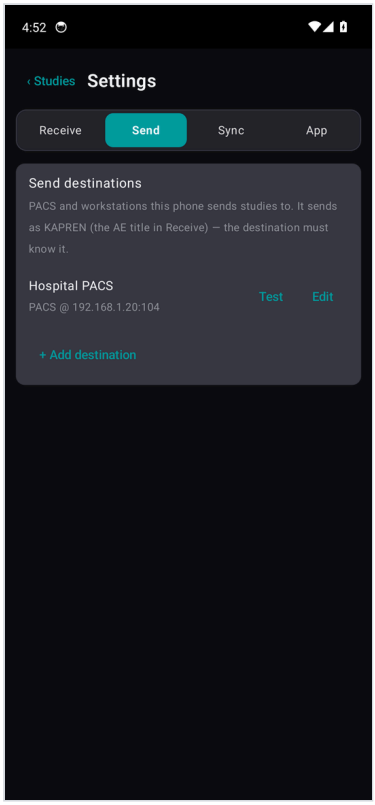


Figure 6. Settings › Send: a saved destination with Test and Edit.

> **Note:** The phone sends as its own AE title (the one in Receive, KAPREN by default), so the PACS must know that title and the phone's address.

Send studies to a PACS

1. Long-press a study › **Send to PACS…**, or tick several studies and tap **Send**.
2. Under **To:** tick one or more destinations (with only one, it is ticked already). **+ Add destination** works here too.
3. Tap **Send**. KAPREN shows "Sending to … — study n of N" and a progress bar; **Cancel** stops after the current image.
4. At the end it says **Sent.**, **Sent to all 2.**, or, for example, **Sent to 1 of 2.** with a line per destination: what was sent, or why it failed.

Images go exactly as stored, with no conversion. One failed destination does not stop the others.

> **Note:** Searching a PACS and retrieving from it is done in KAPREN desktop, not on the phone.

When sending or receiving fails

You see	Likely cause	What to do
Not listening: no Wi-Fi	The phone is on mobile data	Join the same Wi-Fi as the sender
Not listening: port in use	Another app holds 11112	Choose another **Port** and tell the sender
The sender cannot connect	Wrong address, guest Wi-Fi, or (iPhone) **Local network** not allowed	Check the address shown, the network, and the iPhone permission
Refused … — not on the list	**Only these senders** is on	Add that AE title, or turn the list off
Test failed on a destination	Wrong host, port or AE title, or the PACS is down	Check the three values with your PACS administrator
The PACS rejects the phone	The PACS does not know KAPREN	Ask for the phone's AE title and address to be added on the PACS
Nothing arrives after hours (Android)	Background receiving has used its daily time	Open KAPREN, or turn the listener back on

Server sync and restore

Server sync copies the phone's studies to your own KAPREN server, so a lost or new phone can get them back.

Turn on server sync

1. Open **Settings › Sync** and turn on **Server sync**.
2. Your account is shown. Enter the **Sync password** you set on the KAPREN website and tap **Connect**.
3. Under **When**, choose **Automatic, on Wi-Fi (while KAPREN is open)** or **Only by hand**.

Sync studies

- Automatic: KAPREN sends new studies on Wi-Fi; **Sync now** starts at once.
- By hand: tick studies and tap **Sync**, or long-press one › **Sync to server**. This sends at once, on any network.
- A strip on the study list shows progress, with **Cancel**; tap it for the list of what is waiting, sending and already on the server.

Rows show **On server**, **On server n of m** or **Not synced**. **Don't sync this study** (long-press) leaves one out.

Restore studies on a new phone

1. Sign in, connect server sync, and tap **Restore from server…**.
2. Search and tick the studies under **Not on this phone** (studies already on the phone are greyed).
3. Tap **Restore** and wait; **Stop** stops after the current study.

> **Note:** Deleting a study on the phone never deletes it on the server.

Settings and help

Settings at a glance

Open the gear on the study list. **‹ Studies** goes back.

Tab	Holds
Account	Your subscription and when it ends, **Sign out of this device**, **Delete my account**
Receive	The DICOM listener, allowed senders, background receiving and Bluetooth (Android)
Send	Your PACS and workstation destinations
Sync	Server sync and restore
App	Notification permission (Android) and the version

Gestures and buttons

To	Do
Zoom and move the image	Pinch with two fingers
Reset the zoom	Double-tap the image
Scroll images	The slider, ‹ / ›, or the **Scroll** tool
Edit or delete a measurement	Long-press it
See what a button does	Press and hold it
Fill the screen with one MPR pane	Double-tap it
Turn the 3D volume	One finger; two fingers move and zoom

Troubleshooting and FAQ

A study will not open. Use **Import ZIP** or **Open Folder** with the whole study. KAPREN says when files cannot be read; a single file from a series cannot show MPR or 3D.

MPR, 3D or Plane is missing. They appear only for a volume series (many slices with reliable positions). 3D also needs at least 8 slices and graphics support on the phone.

My measurements are gone. Measurements on the phone last while the study is open. Use **Results › Export** before closing.

Nothing arrives from the PACS. See When sending or receiving fails, in Send and receive DICOM.

KAPREN asks me to sign in again. It has been more than 14 days without a successful check, or your subscription changed. Connect and sign in.

Where can I get help? Use the contact form on the KAPREN website, or ask your RadpicsAI representative.