



SARA Demo Installation Guide

System of Assistance in Augmented Reality

Purpose of this package: This is a competition demo build prepared so judges can quickly review the SARA Android app, its AR workflow, 3D molecules, smart manual, simulated/live data dashboards, and SARA assistant experience.

What is included in the judges package

File	Purpose
SARA_AR_Assistance_v1.0.apk	Android application installer. This is the main file to install on the phone.
02_AR_Target_Demo.pdf or AR target image	The single AR target used for the demo. It may be printed or displayed on another screen.
SARA_Demo_Installation_Guide_for_Judges.pdf	This installation and test guide.
Demo video (optional)	Backup reference in case the judge device is not ARCore-compatible.

Important demo note

This is a demo version. For this evaluation build, the same AR target works for all laboratory practices. Judges may select any practice in the app, tap **Start AR Experience**, and scan the provided demo target. The app will use that same target to demonstrate the AR experience across the available practice modules.

Recommended quick demo: Start with P05 or P07 because these are the easiest practices to verify quickly: 3D content, Data dashboards, Manual, and SARA assistant.

Where the target is located

The AR target should be placed in the same judges package folder as the APK. It may be named **02_AR_Target_Demo.pdf**, **AR_Targets.pdf**, or provided as a single image. Open it on another phone, tablet, laptop, or print it. Keep it flat and well lit while scanning.

During this demo, judges do not need different targets for every practice. The same demo target is intentionally used across all practices to make installation and review faster.

Android installation steps

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1. Download **SARA_AR_Assistance_v1.0.apk** from the shared judges folder.
 2. Tap the APK file on an Android phone.
 3. If Android asks for permission, tap **Settings** and enable **Allow from this source**.
 4. Return to the APK and tap **Install**.
 5. Open **SARA** from the phone home screen.
 6. Allow camera permission when requested. Camera access is required for augmented reality.
 7. Open the target file on another screen or print it.
 8. In SARA, select a practice and tap **Start AR Experience**.
 9. Point the camera at the demo target. Keep the target visible and avoid glare.
 10. Test the main modes: **3D**, **Data**, **Manual**, and **SARA**.

Recommended evaluation flow

Step	What to check
1. Launch SARA	Confirm the app icon and branding appear as SARA.
2. Select a practice	Use P05 or P07 first for a fast demo, or select any available practice.
3. Start AR Experience	Camera opens and the app asks the user to scan the target.
4. Scan the target	The same provided demo target works for all practices in this evaluation build.
5. Tap 3D	Verify the 3D/molecule or AR content appears after the target is visible.
6. Tap Data	Verify the simulated/live data dashboard panels appear.
7. Tap Manual	Verify the practice manual or built-in guide is available.
8. Tap SARA	Ask a short practice-related question and review the assistant response.

Device requirements

- Android phone with camera
- Google Play Services for AR installed or updated
- Recommended: Android 10 or newer
- Internet is optional for the base demo. Online assistant features may require internet depending on configuration.

Troubleshooting

Problem	Solution
The app will not install.	Make sure the file ends in .apk. Enable "Allow from this source". Delete older SARA/InorganicaXR builds and try again.
The app icon does not update.	Uninstall the old app completely, restart the phone, and install the new APK again.
The AR camera does not start.	Allow camera permission and update Google Play Services for AR from Google Play.
3D content does not appear.	Keep the demo target visible, flat, and well lit. Move the phone slowly until the target is recognized.
The manual/PDF does not open.	Use the built-in manual view in the app. If needed, install a PDF viewer.
SARA gives a short answer.	Ask a specific practice-related question, for example: "What does turbidity mean in P05?" or "What should I observe in P07?"

Final note for judges

This APK is intended as a functional demonstration of SARA. The demo target is shared across practices so the review can focus on the application workflow, augmented reality interaction, chemistry visualization, smart manual, data dashboards, and SARA assistant.