

Guidance for Location Return Testing - Android

This guidance is for phones running Android.

Test Prerequisites

1. Lost subject phone with an active AirFlare subscription.
2. Location Return test (lost subject search) can be conducted via an authorized version of Field Console or via Web Console.
3. It is possible to conduct search (via Field Console) for the same phone being searched for. (I.e. it is possible to have both Field Console and AirFlare on the same phone, and use it to conduct a search for itself).

Test Setup

1. Ensure subject phone has an active network connection (cellular or Wi-Fi).
2. Ensure subject phone is not connected to an AirFlare Detector. (Either power off AirFlare Detectors or disable Wi-Fi on the Subject phone – using a cellular connection instead).
3. On subject phone, open AirFlare and check the Home Screen for correct configuration.
 - a. Home screen status bar should show “Beacon Installed” and “Beacon Active”
 - b. Ensure none of the following configuration warning messages appear:
 - i. Configuration warning: “Enable WiFi” → Enable Wifi
 - ii. Configuration warning: “Enable Bluetooth” → Enable Bluetooth
 - iii. Persistent dialog box “Allow AirFlare to access this device’s location?” → Select “Allow”
4. Ensure phone **is not** in airplane mode as this turns off cellular data. Location Return will not work if the phone is in airplane mode (unless WiFi is on and the phone is connected to a live WiFi connection).
5. Location Return will work whether the AirFlare app is open and running in the foreground or background OR if the AirFlare app is closed.



Correct Android configuration

Conduct Test

1. Initiate search for lost subject phone via Field Console or Web Console
2. Repeat step 1 to validate the following success scenarios. Reference “Troubleshooting” section below for any failed tests:
 - a. **Test:** Search subject does not respond to the “AirFlare Emergency” notification
Result: Subject phone location returned ~ 30 seconds after search initiation
 - b. **Test:** Search subject responds to the “AirFlare Emergency” notification and selects “Accept”
Result: Subject phone location returned ~ 30 seconds after “Accept”

- c. **Test:** Search subject responds to the “AirFlare Emergency” notification and selects “Decline” (and then waits for the 2 minute timer to expire).

Result: Subject phone location not returned. Status sent back to search team is “Declined”



Initiated At	Subject	Status	Initiated By
Tue 10/1/2019 13:01	Denis Lee (Pixel)	✘ Declined	Denis Lee

Troubleshooting

1. **Symptom:** Status Message “No Report Yet” persists longer than 1min. (No GPS coordinates are returned). However, Search Subject does receive email “AirFlare ALERT. You are the Subject of a Search”.

Cause: Indicates Location Return Request not delivered to phone.

- a. Check to ensure phone is not in airplane mode, is not connected to an AirFlare Detector, and is connected to an active network connection (cellular or Wi-Fi). Once connected / re-connected to an active network, location should be successfully delivered after 20sec countdown completes.



Initiated At	Subject	Status	Initiated By
Sun 9/22/2019 09:11	Denis Lee (Pixel)	🕒 No report yet	Denis Lee

- b. AirFlare may have been “Force Stopped” when it was last closed (Settings → Apps and Notifications → AirFlare → Force Stop). Re-open AirFlare and retest.

2. **Symptom:** Error message returned “GPS denied/disabled”

Cause: Indicates the Location Return Request was successfully delivered to the Subject phone, however, the phone was not able to provide its location. This is either because:

- a. The phone’s location services are off (Settings → Security and Location → Location = OFF) and/or
- b. AirFlare app permissions are set to instruct phone not to share location (Settings → Apps and Notifications → AirFlare → Permissions → Location = OFF)



AIRFLARE Web Console

Initiated At	Subject	Status	Initiated By
Sun 9/22/2019 08:52	Denis Lee (Pixel)	✘ GPS denied/disabled	Denis Lee

Notes:

- If phone location services are off (Settings → Security and Location → Location = OFF), the AirFlare home screen will display a configuration warning “ENABLE LOCATION.” This warning will persist until setting is turned ON.
- If AirFlare app-level location is off (Settings → Apps and Notifications → AirFlare → Permissions → Location = OFF) AirFlare app will display a configuration warning “GRANT PERMISSION.” This warning will persist until setting is turned ON.

3. **Symptom:** Location is successfully returned after 20 seconds, but notification never delivered to phone.

Cause: AirFlare (app level) permissions set to not display notifications (Settings → Apps and Notifications → AirFlare → Notifications → Show Notifications (OFF))

Note: AirFlare home screen will not display a configuration warning. AirFlare team has no plans to display a configuration warning as location will be returned to search team in an emergency.