

X-Plane to GPS
Android application by Appropel
Instruction Manual v1.1

INTRODUCTION

X-Plane to GPS is a utility that allows you to use your Android tablet or other device as a moving map for X-Plane, the popular flight simulator by Laminar Research. The app reads location data broadcast by X-Plane and spoofs the GPS location of the device to match that of the simulated aircraft. X-Plane to GPS is not a moving map itself; it allows you to use Google Earth, Garmin Pilot, or any other application that depends upon the GPS location.

X-Plane to GPS has been developed and tested with X-Plane version 10. Other versions are not guaranteed to work as the internal data formats change frequently over time.

CONFIGURATION

X-Plane to GPS offers configuration instructions within the application itself. To access the instructions simply navigate to the 'Instructions' tab and follow the steps listed there. More detailed versions of these instructions are given below.

- 1. Ensure that the Android device running X-Plane to GPS is set to allow mock locations. It is best to perform this step before starting X-Plane to GPS. From the device's home screen navigate to Settings -> Applications -> Development and ensure that "Allow mock locations" is checked. Turning this setting on allows applications to set the GPS position of the device to anywhere on the Earth; for our purposes this will be the location of the simulated aircraft. Note that some other Android applications will not allow this setting to be enabled, so be sure to remember where it is and how to turn it off if needed.
- 2. Start X-Plane 10 and select the menu item Settings -> Net Connections. Switch to the Data tab and find the box labeled 'IP of data receiver'. Enter the IP address of your Android phone/tablet. X-Plane to GPS displays this value on the Instructions tab; it can also be found under Settings -> Wireless &

- networks. You will get the best performance if your Android device is connected to the same local network as the computer running X-Plane.
- 3. In X-Plane select the menu item Settings -> Data Input & Output. Select the tab 'Data Set'. This tab lists over 100 different data items that can be broadcast over the network. Turn on the leftmost checkbox for items 3, 17, and 20. This sends information about the simulated aircraft's speed, heading, and location to X-Plane to GPS.
- 4. In X-Plane to GPS select the 'Data' tab. The button at the bottom of the screen has two states Active and Paused. Select Active to start receiving data from X-Plane and simulating the GPS position. You should see values in the fields above Latitude, Longitude, Altitude, Heading, and Groundspeed. If these fields are blank or do not appear to be changing (assuming the simulated aircraft is moving) there may be a problem with your network or X-Plane setup. Note that while X-Plane to GPS is active an Android Service is running in the background. This ensures that Android does not prematurely kill the application, but can also use extra battery power. It is recommended to plug your device in while using X-Plane to GPS, and be sure to return X-Plane to GPS to 'Paused' state when you are finished flying.

OPERATION

Once X-Plane to GPS is active you may now switch to the moving map application of your choice such as Google Earth or Garmin Pilot. Any mapping application which depends upon the device's GPS position should work. As you fly the simulated aircraft in X-Plane the map will follow along. One particularly cool thing to do is replay an approach and landing while watching the map to see how well the pilot flew.

When done flying X-Plane be sure to return X-Plane to GPS to Paused status. Also, you may want to disable 'Allow mock locations' to ensure that your device will return to showing the real-world location.