

# Calc+SMS+Geo (Installation Manual)

## Overview

Calc+SMS+Geo is a 3-in-1 mobile application that offers the following features:

- **Calculator:** It supports five basic arithmetic operations: addition, subtraction, multiplication, division, and modulo. When performing multiple operations, it follows the order of operations to calculate the result.
- **SMS:** Messages can be sent directly from the app or the native SMS app depending on the access permission.
- **Geolocation:** It displays the device's current location. When the device has an internet connection, it also shows the position in Google Maps.

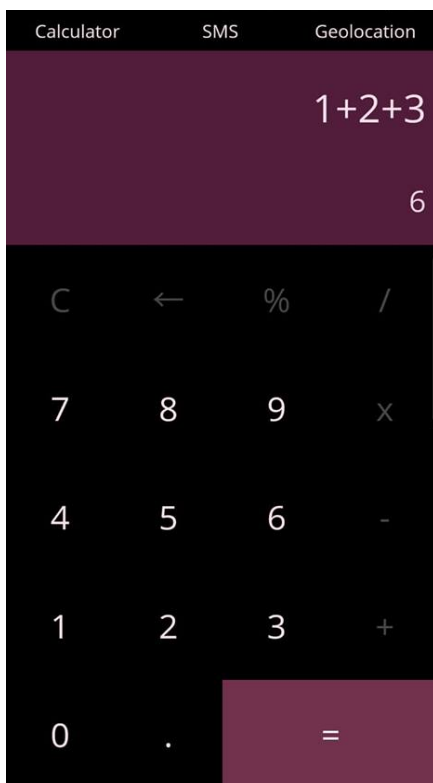


Fig. 1. Calculator

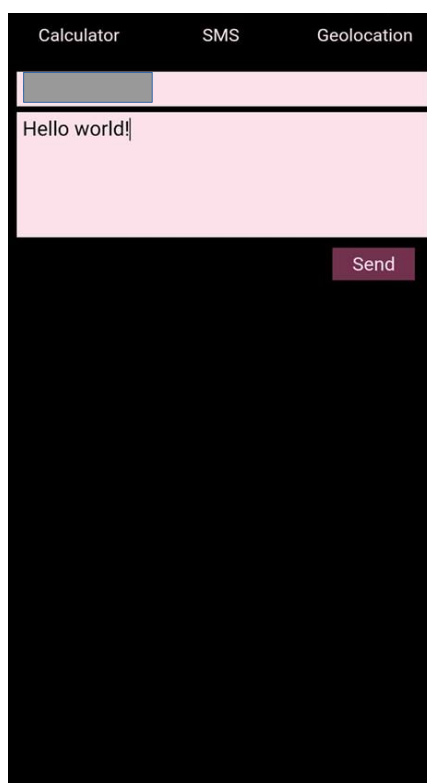


Fig. 2. SMS



Fig. 3. Geolocation

This document will discuss the step by step procedures to install the mobile app's APK on an Android device.

## Requirements

- APK("Android Package") file saved on the device
- Android device
- Internet connection if you want to display the location in Google Maps

## Installation Steps

1. Open the **Settings** menu. This can be done by swiping down from the top of the screen and tapping the gear icon on the top-right side.

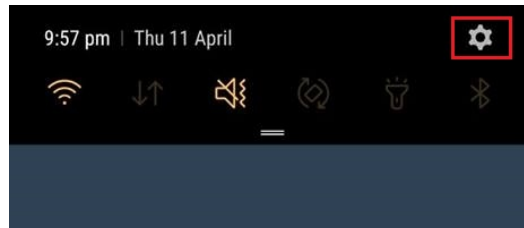


Fig. 4. Gear icon

2. Scroll down and tap **Lock screen and security**.



Fig. 5. Lock screen and security

3. Under the **Security** section, tap **Install unknown apps**.

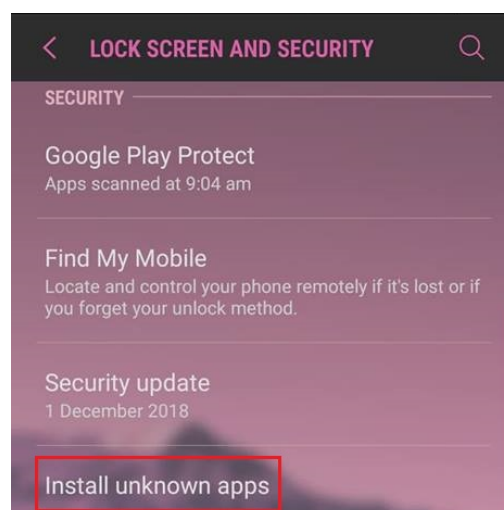


Fig. 6. Install unknown apps

4. Since the APK file was saved on the device prior to this, tap on the file manager (e.g. My Files) and enable the **Allow from this source** option.

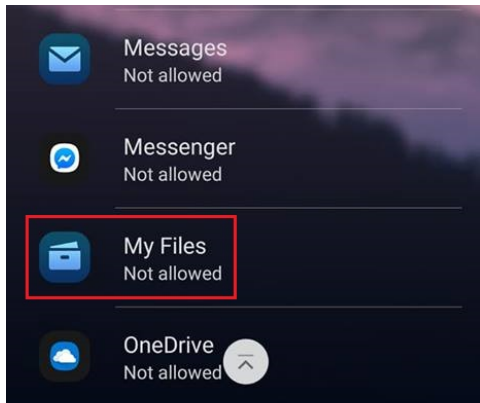


Fig. 7. File Manager



Fig. 8. Allow from this source

5. Using the file manager, locate the APK file to be installed then tap it.

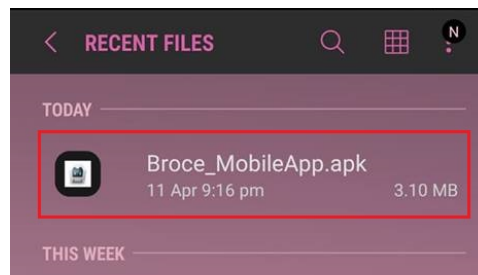


Fig. 9. APK file

6. On the bottom right of the screen, tap **Install**. After installation, tap **Open**.

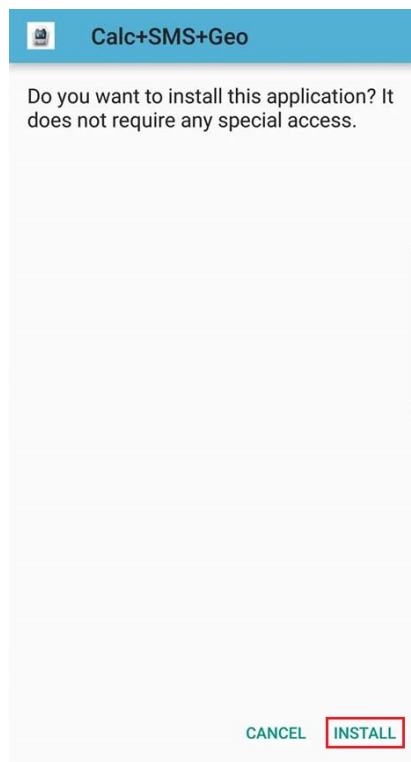


Fig. 10. Install App

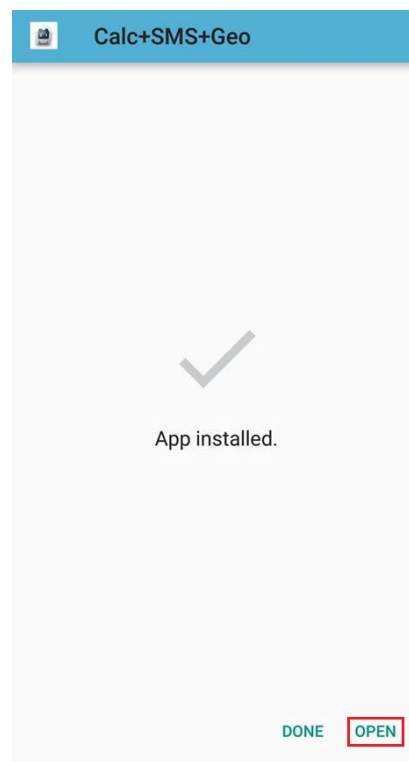


Fig. 11. Open App

7. The calculator will be first displayed upon opening the application. Try to enter some expressions to see how it works.

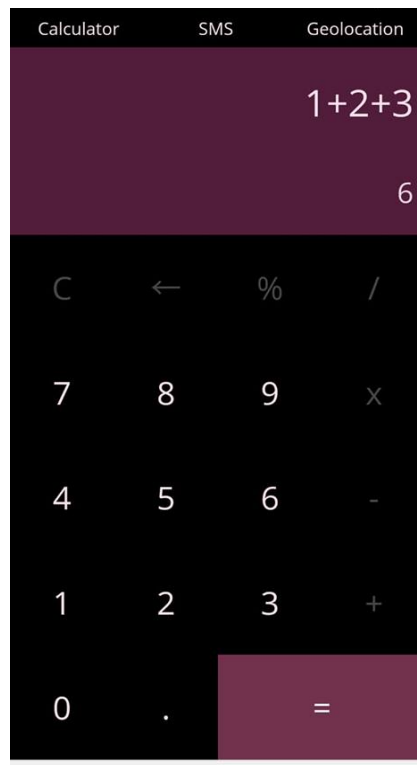


Fig. 12. Calculator

8. Tap **SMS** to display the SMS form. Enter a phone number and message then tap **Send**. The app will then ask permission to send messages.

#### 8.1 Deny Permission

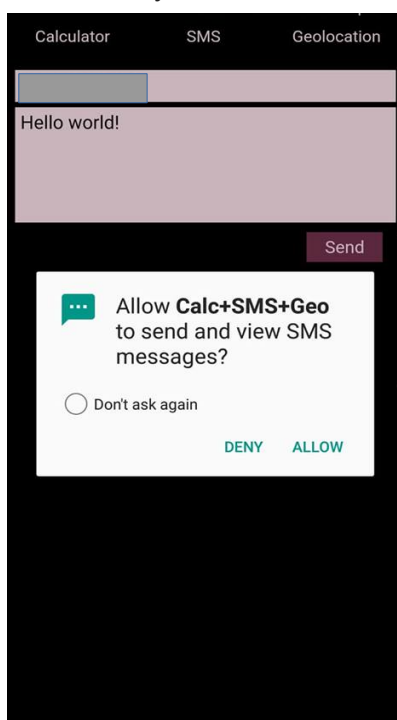


Fig. 13. SMS Permission Dialog

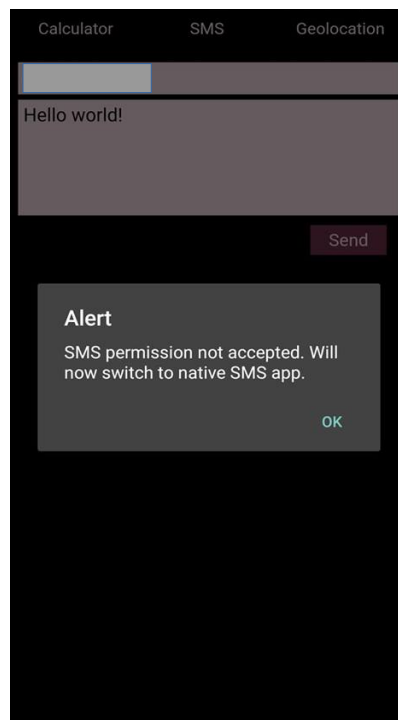


Fig. 14. Deny Permission

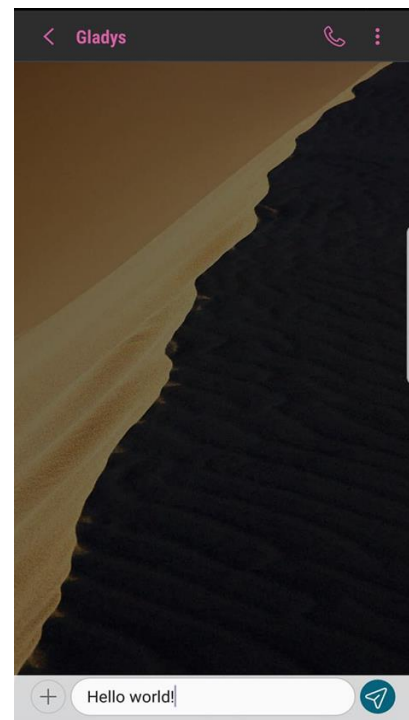


Fig. 15. Native SMS Application

## 8.2 Allow Permission

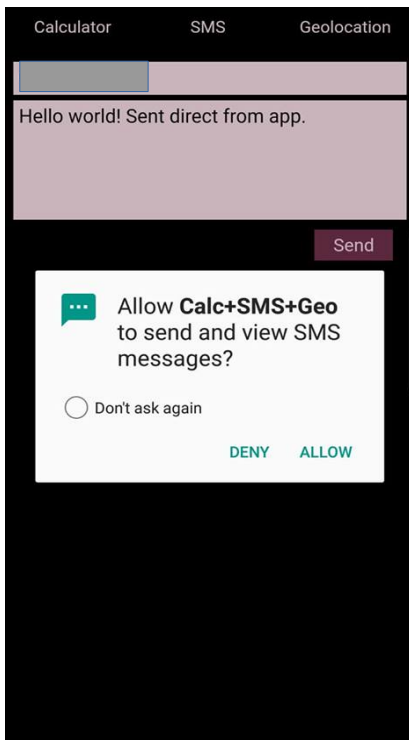


Fig. 16. SMS Permission Dialog

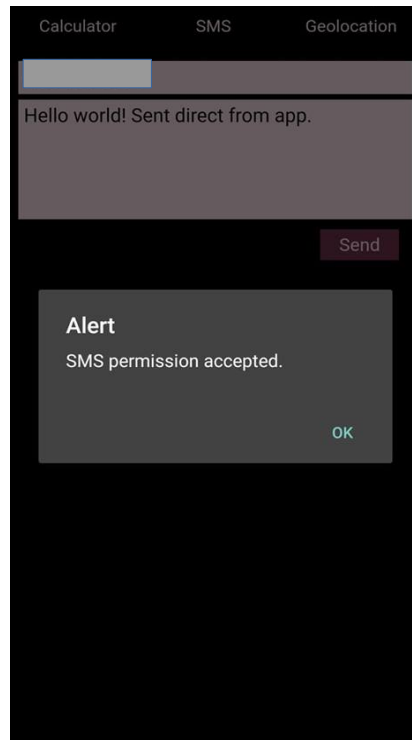


Fig. 17. Allow Permission

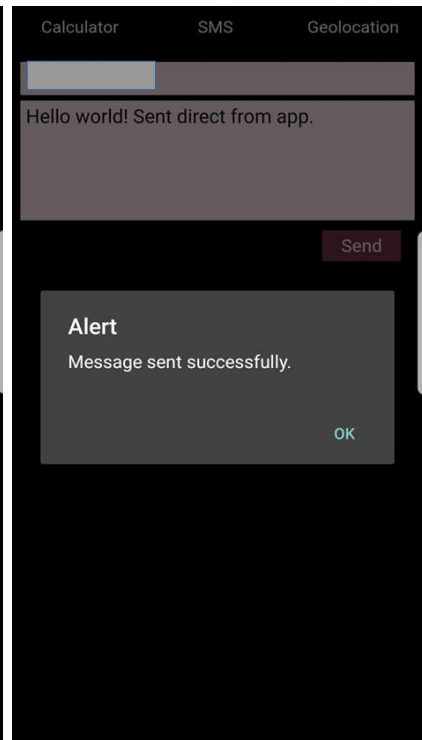


Fig. 18. Message Sent

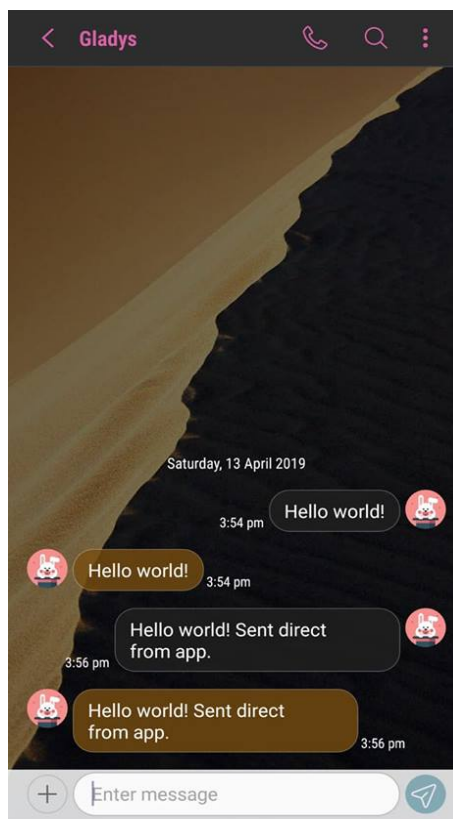


Fig. 19. Sent Messages from within the App and Native SMS App

9. To use the Geolocation feature, the **Location** setting needs to be enabled. If not, an error message will appear when Geolocation is tapped.

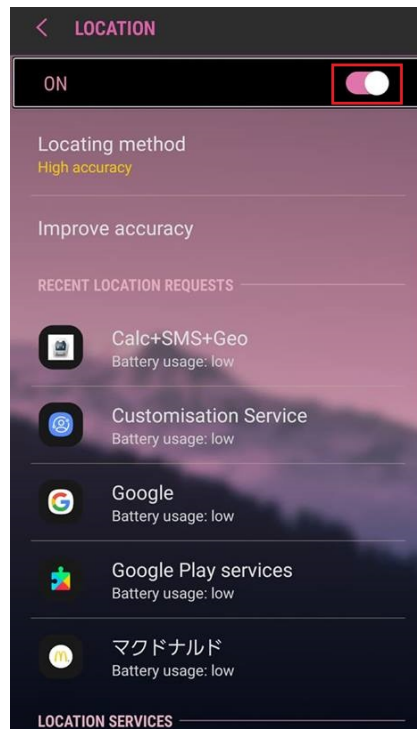


Fig. 20. Enable Location Setting

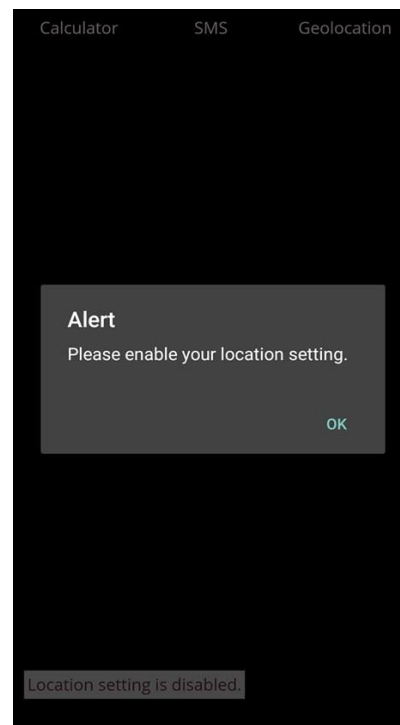


Fig. 21. Error message when location is not enabled

10. Tap **Geolocation**. The app will ask permission to allow access to the device's location. Tap **Allow**. The location will be displayed on the screen. When there is an internet connection, Google Maps will also be shown.

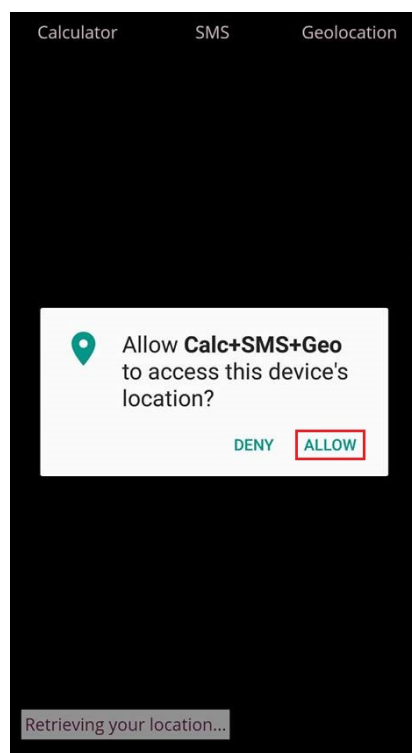


Fig. 22. Location's Permission Dialog



Fig. 23. Google Maps

11. When there is no internet connection, only the coordinates will be displayed on the screen.

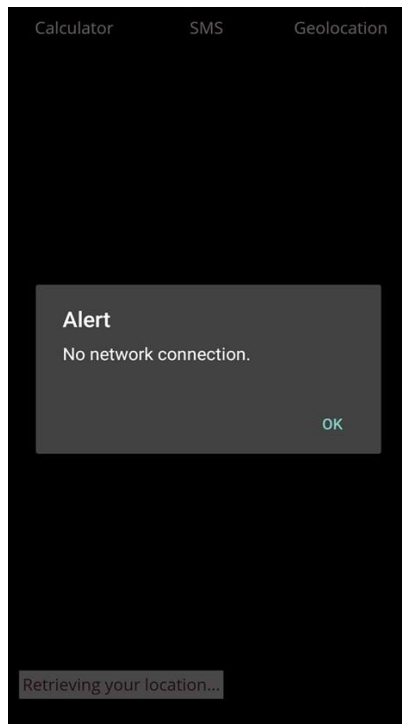


Fig. 24. No internet connection

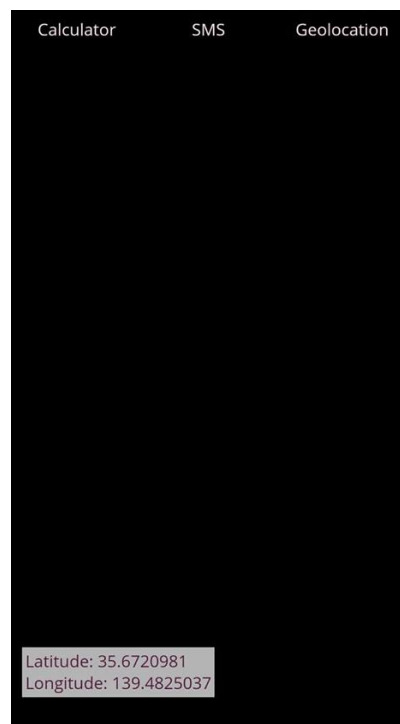


Fig. 25. Device's coordinates