Pebble Compass User Manual

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Table of Contents

- Page 2. Introduction
- Page 2. How It Works
- Page 3. Installing your Pebble Compass
- Page 5. Using the Pebble Compass
- Page 7. Administration
- Page 8. Troubleshooting your Pebble Compass
- Page 8. Appendix

Introduction

Thank you for your interest in the Pebble Compass, the app that enables you to see a compass on your Pebble Smartwatch! With the Pebble Compass, never again will you have to fumble around with a physical compass or pull out your smart phone in order to see which way you're headed.

This user manual will describe how to install the Pebble Compass software, what platform it is intended for, the functionality of the Pebble Compass, how to use it, maintenance of your Pebble Compass, and the appendix.

How it Works:

The Android phone and Pebble Smartwatch are Bluetooth-capable devices, so they are very easy to "connect" to one another. It's as simple as going to your Android phone's settings, enabling Bluetooth, and waiting until your phone finds your Pebble (Figure 0). In order for developers to utilize this communication capability, Pebble has created a straightforward SDK which makes sending data easy. The Pebble SDK is made for Android and iOS phones.

On the Android phone's side, Pebble Compass utilizes and interprets the data sent by its magnetometer. When it has this data, it sends the information to the Pebble Smartwatch, using a very simple command, namely, "sendDataToPebble()". The Pebble Compass watchapp has been programmed to be expecting this information, so it knows to display it once it has been received.

When you are running the Pebble Compass, every time the Android phone detects that you've moved, it will pass new information to the Pebble and the Pebble Compass watchapp will display that.

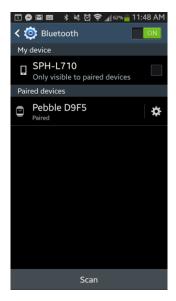


Figure 0: Screenshot of what most Android phone's Bluetooth settings menu looks like. It shows that the Pebble has been paired. If the Pebble has not been paired, you can click the "Scan" button at the bottom and it will search and pair your Peble, enabling a Bluetooth connection between the two.

Installing Your Pebble Compass

This app is created for the Pebble Smartwatch and requires an Android companion app to run. The required Android version is 4.0 (Ice Cream Sandwich) or newer.

To Get the Pebble Compass:

- 1. Open the Google Play app on your smart phone.
- 2. In the search bar, search for "Pebble Compass", and install the app called "Pebble Compass". (Figure 1)
- 3. On your smart phone, go to your official Pebble app.
- 4. Click the "Get Apps" button. (Figure 1)
- 5. Search for and install the "Pebble Compass" app.



Figure 1: Screenshot of the official Pebble app, available on Android and ios phones.



Figure 2: Screenshot of the official Pebble app, available on Android and ios phones.

Using Your Pebble Compass

The purpose of this software is to provide a quick method to view what cardinal direction you're facing using the Pebble Smartwatch. It has one simple task: display a compass. It will not feed you GPS directions or tell you what latitude and longitude you are positioned at - although this is a possible feature for later versions.

The interface of the Pebble app is simple, yet informative. There are two ways to see your cardinal direction. The first way is by displacing one of the eight cardinal directions: N, S, E, W, NE, NW, SE, SW (*Figure 6*). The second will display the degrees in which you are facing away from magnetic north (*Figure 7*).

There are three simple steps to use your Pebble Compass:

- 1. Open up the "Pebble Compass" app on your Android device. (Figure 3). (For installation information, refer to the section, "Installing Your Pebble Compass".)
- 2. Open up the "Pebble Compass" app on your Pebble Smartwatch. *Figures* 3-5
- 3. Allow a couple seconds for the Pebble watch and phone to transfer data.
- 4. You should now see the compass on your Pebble. Happy exploring!

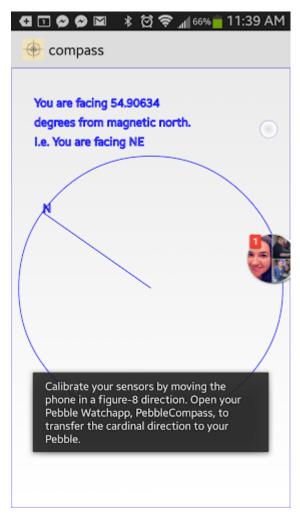


Figure 3: A screenshot of the Android app, showing a reminder to calibrate your sensors.



Figure 4: The Pebble Smatwatch's main menu, where Pebble Compass is located



Figure 5: The first screen opening the Pebble Compass watchapp.

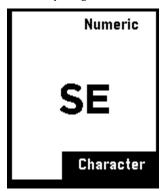
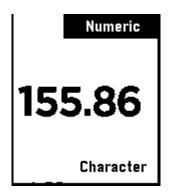


Figure 6: The character cardinal information on the Pebble Compass watchapp.



Figure~7: The~numeric~cardinal~information~on~the~Pebble~Compass~watch app.

Administration

The Pebble Compass does not require any permission levels such as Administrator level or User level. You do not need to log in or register an account, either.

Troubleshooting

If the compass does not appear to be giving an accurate reading, the smart phone's magnetometer and accelerometer may not be calibrated. To do so, point your phone up towards the sky and move it in a figure-eight motion. (*Figure 8*) It is recommended that you calibrate it with each use of the software because there is not a warning message to remind you.



Figure 8: The figure-eight motion used to calibrate the sensors.

If the Pebble is not displaying any cardinal information, similar to Figure 8, this means one of two things: The Android app has not yet been opened, or your Pebble is not Paired to your Android device. Please open the Android app which has the icon displayed in Figure 9.



Figure 9: Icon for the Pebble Compass Android application.

Appendix

"Watch App" refers to the application that is installed on the Pebble Smartwatch.

"Companion App" refers to the Android app that interacts with the watch app on the Pebble Smartwatch. This name was dubbed by the Pebble developers. SDK is an acronym for "Software Development Kit". The magnetometer is a small piece of hardware implemented in most modern smart phones. It detects where magnetic north is.

At this time, the Pebble Compass app is not compatible with any other smart phone besides those with the Android operating system.

The installation section of this app implies that the Pebble Compass Android and Pebble app are publicly accessible by the Google Play Store and Pebble app store. If the apps are not already available on the respective app stores, it means they have not been yet approved by the app stores' moderators.

You can request an advanced copy of the Pebble and Android application by emailing the developer at Nicole.Flokos@gmail.com. You can also direct comments or concerns about the Pebble Compass to that email.