

# Samsung I8910/Omnia HD Report

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Problems and suggested solutions for the  
Samsung i8910/Omnia HD from the users

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## Abstract

The report was prepared to highlight problems with the Samsung I8910 firmware and software and to suggest possible solutions and additions that can be made to make it better for the users. The report will cover factors that are only software/firmware related (which can therefore be addressed in an update by Samsung). It has been prepared in collaboration with members of several forums related to and/or dedicated to the Samsung i8910, backed by a petition signed by \_\_\_\_\_ people from all over the world at <http://www.petitiononline.com/fixi8910/petition.html>[1]. Problems discussed include- lack of firmware updates for certain regions in which the phone was officially launched, inexplicable lag or delays in opening the media and applications folders, faulty web browser that crashes out of websites without warning, lack of auto focus function in video capture(although it can be achieved by tapping the phone lightly) and the lack of kinetic scrolling, a feature which has been implemented in the a new Chinese firmware update but not in any other, to name a few. The report also covers the accomplishments made by individuals such as hyperx and se7en (forum names) in the online communities to fix these problems and others and their short comings. As individuals taking time out of their busy lives without as much experience, resources and knowhow as Samsung engineers, they can only go so far which is why we need Samsung Mobile to play its part. Also promised, was an applications store for the i8910 [2] but sadly the device is not supported even though it is flaunted in the advertisement for the store. One of the main features of the device is its HD video recording capability. Again it falls short by not delivering the promised 24 frames per second [3] but 20 or less. We also suggest the possible implementation of the Android 2.0 Operating System (OS) given that devices such as the upcoming Sony Ericsson Rachel have similar specifications and yet operate with that OS.

## Aim

The aim of this report is to get Samsung Mobile to realise the state of the phone and what the users think should be done so that the necessary changes can be made to ensure this was a worthwhile investment for us. The reason this report was made is that we see a lot of potential in this device and we do not wish to see this go to waste as has happened in the past with other Samsung phones such as the i8510 Innov8 and the G810 before it. It has some of the most powerful hardware in a mobile phone on the market but software support from Samsung is lacking and this is the only way its full potential can be realised. We've had enough and we're taking a stand.

## Table of Contents

|   |    |
|---|----|
| Abstract .....  | 2  |
| Aim .....   | 2  |
| Table of Contents .....   | 3  |
| 1.0 Samsung i8910 Problems Background.....                            | 5  |
| 1.1 Introduction .....  | 5  |
| 2.0 Problems with the i8910 .....                                     | 5  |
| 2.1 No updates for all regions .....                                  | 5  |
| 2.2 Camera problems.....  | 5  |
| 2.2.1 Choppy HD recording video .....                                 | 5  |
| 2.2.2 Camera is slow.....   | 6  |
| 2.2.3 Auto focus not available in video mode.....                     | 6  |
| 2.2.4 Settings are flawed .....                                       | 6  |
| 2.2.5 Video audio quality is still bad.....                           | 6  |
| 2.2.6 Audio sync bug in video recording.....                          | 6  |
| 2.2.7 JPEG Compression is too high .....                              | 6  |
| 2.3 Web browser problems.....   | 6  |
| 2.4 Slow access times for applications, music and media folders ..... | 7  |
| 2.5 Slow Java engine .....  | 7  |
| 2.6 Little free space on C: drive .....                               | 7  |
| 3.0 Lack of support for the device.....                               | 8  |
| 4.0 No applications store .....                                       | 8  |
| 5.0 No widget support.....  | 9  |
| 6.0 Additional functionality .....                                    | 9  |
| 6.1 Kinetic Scrolling .....   | 10 |
| 6.2 Automatic e-mail configuration .....                              | 10 |
| 6.3 FM Transmitter .....  | 10 |
| 6.4 Screen Saver .....  | 11 |
| 6.5 Threaded SMS.....   | 11 |
| 6.6 Torch.....  | 11 |
| 6.7 Equaliser .....   | 11 |
| 6.8 Reset option.....   | 11 |
| 6.9 Call log and contacts should auto quit after dialling.....        | 11 |
| 6.10 Long press option for volume rocker .....                        | 12 |

|  |    |
|--|----|
| 7.0 Omitted features .....               | 12 |
| 7.1 Video editing.....                   | 12 |
| 7.2 QWERTY Keypad in portrait mode ..... | 12 |
| 7.3 Voice commands.....                  | 13 |
| 8.0 Symbian^2/^3 .....                   | 13 |
| 9.0 Android .....                        | 14 |
| 10.0 Conclusions .....                   | 14 |
| 11.0 Recommendations.....                | 15 |
| 12.0 Acknowledgements .....              | 15 |
| 13.0 List of References .....            | 15 |

## **1.0 Samsung i8910 Problems Background**

### **1.1 Introduction**

The Samsung i8910 is one of the most powerful and feature packed phones on the market. It is also a ground breaking phone being the first S60 5<sup>th</sup> edition phone with a capacitive touch screen, an ARM Cortex-A8 600 MHz processor and 256MB RAM, the first with a large 3.7" AMOLED display and an 8 megapixel camera with HD video recording[3], features that would have anyone want buy this phone with little hesitation. The most attractive feature of all was the potential this phone had. Although there was not a lot out there to take advantage of all that greatness, we were misled into believing that there was a plan, a future in which all that raw power and gut will be taken full advantage of, but alas, it was never to be. As it is, the phone feels incomplete, it is buggy, there's a lot of lag and not what it promised to be. Around the internet it received great reviews and it won over the hearts of many. In all the reviews, it was the potential that pulled it through- all the reviewers overlooked the pressing firmware issues as much as possible and said it would all be fixed in a firmware update.

## **2.0 Problems with the i8910**

The problems with the phone are many and I will try to cover them as exhaustively as possible.

### **2.1 No updates for all regions**

The few updates that are released for the phone are only released for certain regions at a time and never at all in other regions. This leaves other users in parts of the world that are not "important" to Samsung left in the dark. It would be understandable if updates are days or weeks apart for the different regions but in a lot of cases, they never come.

The latest update for France for instance is from July 2009 yet the latest update for Italy is from September 2009[4]. India hasn't even got an update yet! So far only Italy, Russia and China have the new update with the 3D Task Switcher and most people have risked voiding their warranty getting this firmware.

### **2.2 Camera problems**

Given that the part of the name of the phone (HD) is actually derived from the capabilities of the camera, the underwhelming performance of the phone in this department is very disappointing.

#### **2.2.1 Choppy HD recording video**

The HD video recording does not work the way it is supposed to. Too many frames are dropped in HD recording making the video look very choppy, difficult and unpleasant to view. It defeats the whole purpose of having HD video recording making it more of a gimmick than a real, useful feature.

### **2.2.2 Camera is slow**

While the interface of the camera is probably the best on any mobile phone today, the camera is very slow. In testing, it took around 15 seconds to launch the camera and take a photo before it was ready to take a second photo. That's far too slow for any practical situation.

### **2.2.3 Auto focus not available in video mode**

This feature is on just about any smart phone out there and we certainly expected it to be on this phone if not any other. It is available in the stills mode and it can be forced by tapping the phone in video mode. Clearly the capability is there, only it is not implemented.

### **2.2.4 Settings are flawed**

The quality of pictures produced by this phone is poor. They lack the quality and clarity of equally capable phones. Hackers of the phone have had to take the settings from the Nokia N86 as they produce better pictures. The point of my mentioning this is to highlight the fact that it is possible to produce better pictures on the device, only if the settings are tweaked the right way.

### **2.2.5 Video audio quality is still bad**

The audio quality in video is really bad. It has improved slightly for the few regions that received firmware updates but it is still poor.

### **2.2.6 Audio sync bug in video recording**

The audio is not always perfectly synced with the video at times during video recording. This can be attributed to the dropping frame rate issue described above but I thought I should mention it.

### **2.2.7 JPEG Compression is too high**

This results in pictures coming out looking worse than they actually are. Given the amount of on board storage on the device (8GB/16GB), it is a small sacrifice.

## **2.3 Web browser problems**

The web browser built in to the phone is virtually unusable because it crashes. Within a few seconds of opening some websites the browser crashes out, without warning. When it does work, it is plagued with bugs. It is generally unresponsive to swipe movements for

scrolling and panning. The long press to zoom feature is choppy and difficult to use, users find themselves zooming in and out when trying to navigate around a page. Other web browsers on the s60 platform (from e.g. Opera and Digia) do not suffer from these bugs but as the built in one is the default, there is no escaping from it. This has been noted as a problem with Flash 3.1 on the device.

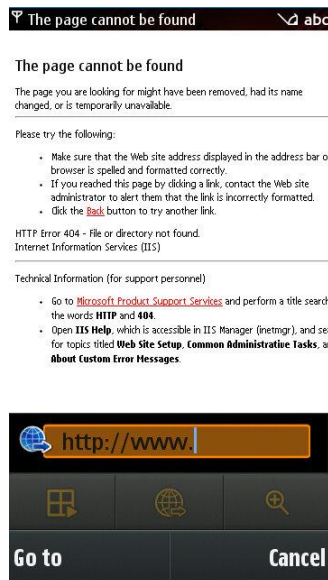


Figure 1 Buggy web browser on Samsung i8910

## 2.4 Slow access times for applications, music and media folders

For such a high spec device it is baffling why this is so. It takes up to 10 seconds just to open the applications folder. Most users bought this phone with the s60 platform for the awesome applications but the trouble of having to wait so long just to access the containing folder is unacceptable. The situation gets even worse when there are layers of folders containing different applications. Having the ability to organise apps in folders is a bonus that s60 smart phones have but it is defeated by the slow operation of the device.

The same goes for the music and gallery folders. Each time they have to be scanned before they can be accessed and for people with a lot of media content a lot of time is wasted just waiting.

## 2.5 Slow Java engine

Having the ability to run java applications is great but it is bogged down by the slow java engine that the phone is equipped with. This makes playing java games or running java apps pointless and impossible. Hackers have been installing a newer version of java similar to that seen in Nokia phones (n97, n97 mini) [5] with much better results.

## 2.6 Little free space on C: drive

The C: drive is in a sense the heart of the system. That is where internet cache is stored, messages, system files etc. In the latest firmware release, only 32MB is free on this drive.

Several applications are installed by default to this drive and it is not possible to change it. Installing apps such as Route66 and updating Quick Office and others depletes this space fast because it is so limited and the phone starts getting slow, running out of memory etc. Again, hackers in their spare time managed to redirect internet cache and removed certain apps from the C: drive leaving more than 100MB free. Surely it cannot be too difficult for Samsung Engineers.



Figure 2 Custom firmware showing 103MB free on C: drive

### 3.0 Lack of support for the device

This device has a lot of potential. The hardware was built in such a way as to make it relevant still in the near future. For instance, the recently announced Moto Droid has about the same processing power, which is the same as that in the iPhone and the Palm Pre. The difference between the i8910/Omnia HD and these devices is that Samsung is not doing enough for the phone, for the platform. There are no s60 5<sup>th</sup> edition phones with the same horse power as the i8910 and thus there is no reason for a company such as Nokia to make apps that can take advantage of OpenGL ES 2.0 for instance. It is all up to Samsung Mobile.

In the early days, there were demos on the i8910 from the PowerVR SDK [6] showing what the Omnia HD was capable of with its processing power and graphics core but unfortunately that's as far as it went. Nothing tangible has come out of the Samsung Mobile Innovator (<http://innovator.samsungmobile.com/>) program for this device. Only 9 substandard apps are available for s60v5. [7]

### 4.0 No applications store

The initial press releases for the Samsung Apps Store (<http://samsungapps.com/>) claimed that the store was going to be for the i8910 [2]. The video advertisement for the store even features a user shopping for apps in the store on the i8910. To our shock when the store was launched in September there was no support for the phone. A few months



down the line and still no support. The store gave us hope that maybe there was something specifically tailored for the phone to take advantage of its superior hardware but it never was.

## How to Use by Supported Phones

Click a phone image below to see how to access Application Store from your phone.



Figure 3 Screen capture showing devices supported on Samsung App Store; no i8910

### 5.0 No widget support

The Touch Wiz UI sets the phone apart from other Symbian phones and widgets form the core of the experience. Besides the ones that were there when the phone was launched, and despite the ease at which these widgets can be made there have been no new widgets. There are a fixed number of widgets on the phone; a lot of these are merely shortcuts to applications or links to websites. As application shortcuts, users have found some of them useful but the limited number and the failure to include all or a mechanism to create new widgets on the fly is a minus. As widgets form the core of the user interface, more of them or more control over them would be an added advantage.



Figure 4 Widgets on the i8910, not many

### 6.0 Additional functionality

These are functions and features some of which we've seen implemented by hackers, seen in certain firmware updates, seen in use on the phone in early iterations of the firmware and some wishful updates that would be useful to most of us if possible.

## 6.1 Kinetic Scrolling

This has been seen implemented in the web browser for the current Chinese firmware. Further integration of kinetic scrolling through out the phones' UI is also possible as seen in the 2.0 update for the Nokia N97 and also in the 5800. It should work even better on the i8910 with its capacitive display and superior processing power.

## 6.2 Automatic e-mail configuration

The device is very capable of handling emails but the troubles of having to get the relevant information to configure common POP and IMAP settings for mail leaves the feature overlooked. An application that can perform the configurations could make the feature more attractive, convenient and usable for the users.

## 6.3 FM Transmitter

This is not for sure but there is a belief that the phone has an FM Transmitter that is disabled. This is a very useful feature which would enhance the phones' functionality and add to its massive feature list. A table on Samsung Mobile Innovator website seems to indicate it has one. [8]

Table 1 FM Transmitter is in the i8910 according to this table [8]

| PLATFORM         | S60 v5.0 | S60 v3.2 (FP2) |       |      | S60 v3.1 |      |      |      |
|------------------|----------|----------------|-------|------|----------|------|------|------|
| DEVICE           | i8910    | i7110          | i8510 | i870 | g810     | i560 | i550 | i450 |
| GPS              | •        | •              | •     | •    | •        | •    | •    |      |
| eCompass         | •        | •              |       |      |          |      |      |      |
| FM transmitter   | •        | •              |       |      |          |      |      |      |
| WiFi             | •        | •              | •     |      | •        |      |      |      |
| Touch UI         | •        |                |       |      |          |      |      |      |
| Optical joystick |          | •              | •     |      |          |      |      |      |
| 4-way control    |          |                |       | •    | •        | •    |      |      |
| Trackball UI     |          |                |       |      |          |      |      |      |

| PLATFORM    | S60 v5.0 | S60 v3.2 (FP2) | S60 v3.1 |  |  |  |  |                     |
|-------------|----------|----------------|----------|--|--|--|--|---------------------|
| Touch wheel |          |                |          |  |  |  |  | <a href="#">FP1</a> |
| Camera      | 8MP      | 5MP            | 8MP      |  |  |  |  |                     |

## 6.4 Screen Saver

The phone has a large amazing AMOLED display but nothing to show it off. The i8510 had a clock and a “Photo River” feature in the gallery which would just shine on the i8910. The existing gallery is uninspired, slow and more of a gimmick than anything.



Figure 5 Samsung i8510 with 'Photo River'

## 6.5 Threaded SMS

This is another suggested feature. The standard SMS/messaging style is dated and we would have loved to see threaded SMSs. These are more streamlined and they make more sense than anything. It would be nice to see this integrated into the phone.

## 6.6 Torch

Taking advantage of the LED flash which was chosen over a Zenon flash, this would be a great feature.

## 6.7 Equaliser

The phone has amazing sound and one of the loudest speakers on a mobile phone on the market. To take full advantage of Samsungs brilliant DNSe 2.0 technology, an equaliser would be an added advantage, giving more control to the user.

## 6.8 Reset option

The i8910 like any other devices has problems and it sometimes crashes completely or develops errors. As such, a reset option from the power button will be a handy feature.

## 6.9 Call log and contacts should auto quit after dialling

The contacts and call log remain active after dialling. This is an annoying bug that leaves the apps running in the background most of the time.

## 6.10 Long press option for volume rocker in music player

Users have also proposed more functionality for the volume keys. Long press to adjust the volume, and a short press to skip to the next track. Effectively, there are no physical controls for the music player (a must!) yet the hardware is there.

## 7.0 Omitted features

These are features that appeared in previous, unreleased versions of the phones firmware and that exist in the SDK that we would like to see come back. As the 3D task-switcher returned [9], we don't see why not these.

### 7.1 Video editing

Early iterations of the device had this feature and it was fully functional as demoed on videos online. For a phone that is marketed as a camera phone having this feature goes without saying. Even the i8510/Innov8 which is inferior in almost every way has a video editor. Why this feature was removed remains a mystery.



Figure 6 Screen capture showing video editor in an early firmware build

### 7.2 QWERTY Keypad in portrait mode

One of the many advantages of having a touch screen on a device is that the ways in which input can be entered into the phone are unlimited. The exclusion of the QWERTY keyboard in portrait mode makes no sense. The iPhone for instance used to have only a portrait keyboard in the Notes/Mail applications until recently yet it has a smaller display. This is a necessary feature that was unnecessarily excluded yet it comes standard with s60 5<sup>th</sup> edition, it is included in the SDK.

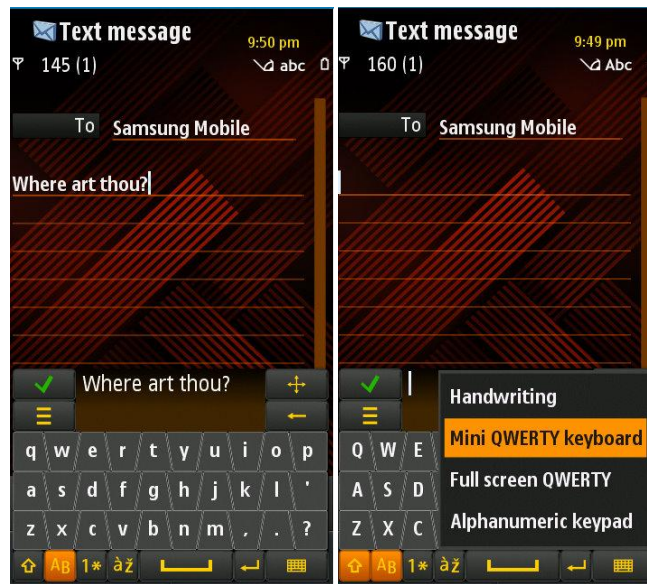


Figure 7 Portrait QWERTY keypad on the i8910

## 7.3 Voice commands

This feature was included in the SDK but is absent from the final release of the firmware. It is a function that is found even in basic non-smart phones and its inclusion would further enhance the i8910.

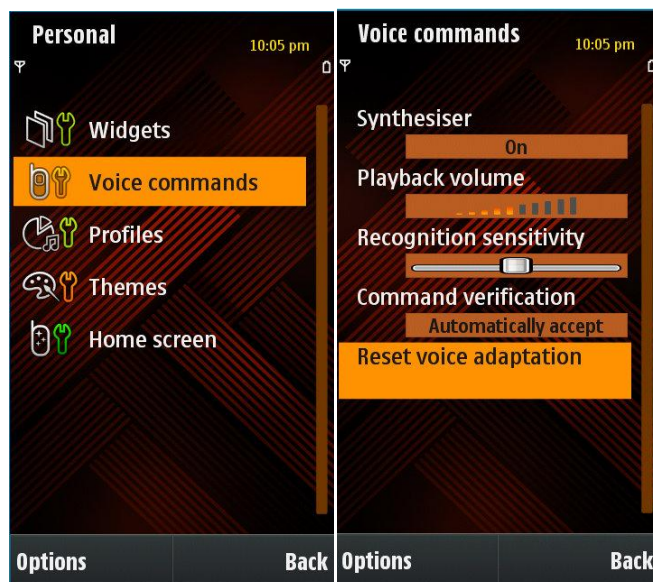


Figure 8 Voice commands on the i8910

## 8.0 Symbian^2/^3

Due to the recent departure from Symbian s60 to the new Symbian^2 and Symbian^3 platforms [10], and given the superior hardware of the i8910, an upgrade to these platforms makes sense. Hackers have managed to include parts of Symbian^2 into their custom firmware but without

support from Samsung they can only go so far. The update would put the phone on par with similarly specified devices such as the iPhone in terms of the UI and user experience. Making headway in this direction will be highly beneficial to all.

## 9.0 Android

Another suggestion people have made is to bring Android 2.0 to the device. Although it is possible[11], because of the amount of complexity involved, little progress has been made in this direction, but again this is something that people want to see that resolves a lot of the problems people have using the device.



Figure 9 Android on the i8910

## 10.0 Conclusions

The bottom line is that, we the users of the Samsung i8910 are not happy with the device. It feels rushed and incomplete yet it harbours so much potential. Potential is the key here, it is this potential that we wish so see fully exploited. Potential is the reason we bought the phone in the first place, aware that there was not a lot out there tailored for the phone.

The Omnia HD is plagued with problems; all firmware/software related which make the phone a drag to use day to day. To think that hackers, people who do not work for Samsung or have experience in the field are able to make more progress in addressing most of these issues is baffling. Clearly Samsung Mobile is slacking, lazy and does not care about the consumer. We are being neglected and taken for a ride. The sad thing is, people continue to buy this phone unaware of all this and all Samsung Mobile has done is make the best effort to shut us up instead of taking action.

The issues and suggestions mentioned in this report are real and by no means farfetched. They have been backed up by **thousands** of i8910 users from all over the world. We may not be many, but we demand that our voice be heard. Samsung must take action.

Our hope was that Samsung would up their game to make sure that the phone was catered for but it never did, it did not live up to its promise. We invested in this phone and we demand that

Samsung Mobile invest its time and efforts as well to make this device what it was supposed to be in the first place.

## 11.0 Recommendations

We therefore recommend that Samsung Mobile takes swift actions in addressing the aforementioned issues. We also ask that Samsung Mobile looks into the suggestions and seriously considers them as viable options. If ill experienced hackers working alone can pull it off, why can't Samsung Mobile.

1. **Universal firmware for all regions. If not, to have a fewer versions of firmware period, say 3 versions for the different parts of the world.**
2. **Increase support for the device, more applications, and more widgets tailored for the device.**
3. **Samsung Applications Store support for the phone.**
4. **Update Java engine to version 2.02. Also enable installation of the java engine as is the case with Nokia phones to enable future updates without the need for an entire firmware update.**
5. **Fix camera issues- frame rate in HD video recording, audio, settings etc.**
6. **Update the browser to fix problems with flash, responsiveness, YouTube integration etc.**
7. **Implement kinetic scrolling throughout the UI, not just the browser.**
8. **Add automatic email settings.**
9. **Bring back features omitted from the device, video editing, portrait QWERTY, voice commands etc.**
10. **Consider adding the additional features suggested to make the phone more usable, music controls, threaded SMS etc.**
11. **Clear up issues pertaining to the FM transmitter and activate it if it is present.**
12. **Consider updating to Symbian^2/3.**
13. **Consider giving users an option to switch to android.**
14. **Take this report seriously as we invested in your device and we expect as much back.**

## 12.0 Acknowledgements

Many thanks to the \_\_\_\_ people who signed the petition supporting this report.

Petition Online for hosting the petition at

<http://www.petitiononline.com/fixi8910/petition.html>

Members of the forums especially at <http://forums.samsungi8910omnia.com/> and <http://www.samsungomniad.com/forum/>.

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