



Android Rooting Acer Tablet ACTAB721

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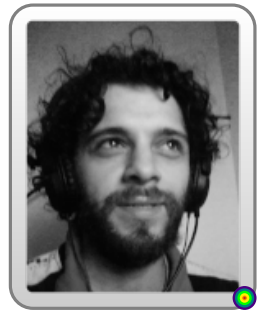
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For Giuseppe Mauro

About the Author

Daniele Della Cioppa, an IT Solutions student at [ACL Essex](#), has developed his IT skills at Federico II University before gaining practical work experience in various sectors with [Akhter](#). This has allowed him to meet the demands of today's workplace. Daniele has a strong background in designing and implementing Android apps, utilizing TCP/IP and PostgreSQL databases while following the SOLID principles. Alongside his technical expertise, Daniele is a language enthusiast who hosts the podcast "[Speak Napolitano and Survive in Naples](#)," where he shares valuable language-learning tips. Fluent in five languages, he became a fan of the Spaced Repetition System and flashcards after listening to Kahei Lee's "[Poetic Cantonese](#)" podcast and Mark Pentleton's language-learning techniques podcast. Additionally, he has gained insights from Andrea Giuliadori's book "[Studia meno studia meglio](#)," which helped him develop more efficient study habits. In his spare time, Daniele works on independent projects to explore the capabilities of the Android Operating System, which he showcases on [his webpage](#).



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Preface

This book has been written in L^AT_EX. The basal font used is FreeSerif.

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Why Create a Book on Android Rooting?

- **U**nderstanding the process of rooting an Android device can be a challenging task. Each device is a unique journey on its own, with no guarantee of reaching the desired destination. The decision to create a book on this topic stems from the need for organized and structured information, enabled by the power of LaTeX.
- **R**ooting an Android device is not a straightforward task, and it becomes even more challenging when you have only one device at your disposal. Each Android device has its unique specifications, hardware configurations, and software versions. Therefore, the rooting process can vary significantly from one device to another. What works for one device may not work for another, and the consequences of unsuccessful rooting attempts can be detrimental.
- **G**aining privileged access to the device's system files and functions through the process of rooting comes with inherent risks. Rooting may potentially void the device's warranty and, if not performed correctly, can result in system instability, data loss, or even bricking the device entirely. When you have only one device, the stakes are higher as you lack the convenience of a backup device to rely on in case of any issues or failures.
- **E**ach manufacturer and carrier imposes different restrictions and security measures on their devices, making the rooting process even more intricate. Some devices have locked bootloaders, which adds an extra layer of complexity to gaining root access. Additionally, system updates and security patches released by manufacturers can render previously working rooting methods ineffective, necessitating the exploration of new techniques and exploits.
- **N**avigating the world of Android rooting requires in-depth technical knowledge and a thorough understanding of the device's specific architecture and software. It involves working with complex commands, custom recovery tools, and potentially modifying critical system files. Without proper expertise and guidance, attempting to root a device can result in irreversible damage.
- **T**he decision to create a comprehensive book on Android rooting stems from the recognition that having organized and reliable information is crucial in tackling this challenging endeavor. By documenting the journey, sharing experiences, and providing step-by-step instructions, this book aims to serve as a valuable resource for those willing to explore the world of rooting, while also emphasizing the importance of caution, research, and understanding the specific risks and implications involved.

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Android Rooting

Acer Tablet
model n. ACTAB721

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Part I

Preparation



Initial Steps

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1.1 Let's Get Started

► Welcome to the "Let's Get Started" section for exploring the rooting of the ACTAB721 device! Before we begin, it's important to understand that rooting carries risks and may void your device's warranty. Make sure you understand the risks involved and proceed with caution.

1.1.1 Introduction to Rooting

Rooting is the process of obtaining administrator privileges (root access) on your Android device. It grants you greater control over the operating system, allowing for deep customization and modification of your device. However, please be aware that rooting comes with risks, such as data loss, device malfunctioning, and compromised security. Exercise caution and be aware of the potential negative impacts before proceeding.

1.1.2 Device Preparation

Before starting the rooting process for your ACTAB721 device, take a few precautions:

- **Enable Developer Options:** Go to the device's Settings, scroll down to the "About phone" or "About tablet" section, and tap the "Build number" repeatedly to enable Developer Options.
- **Enable USB Debugging:** Access the Settings, navigate to Developer Options, and enable USB Debugging. This allows your computer to communicate with the device during the rooting process.
- **Fully Charge Your Device:** Ensure that the ACTAB721 device is fully charged or connected to a power source during the rooting process to prevent any unexpected shutdowns.

1.1.3 Bootloader Unlocking

In some cases, rooting the ACTAB721 device may require unlocking the bootloader. Unlocking the bootloader allows for the installation of custom software on the device. To unlock the bootloader of the ACTAB721 device there's an option that you need to toggle on: **OEM UNLOCKING**.

If you can't access Developer Options you can still launch it via the following code:

Listing 1.1 Launching Developer Options Activity

```
1 {  
2     Intent intent = new Intent();  
3     intent.setComponent(new ComponentName("com.android.settings", "com.android.settings.  
4     DevelopmentSettings"));  
5     context.startActivity(intent);  
6 }
```

1.2 Exploring Alternative Methods

▶ While the use of the **TEAM Win Recovery Project (TWRP)** is a popular method for rooting Android devices, unfortunately, it is not supported for Acer devices. However, there are alternative methods available that you can explore to root your Acer Android device. In this section, we will briefly discuss some of these alternative options.

1.2.1 One-Click Rooting Tools

One approach to consider is the use of one-click rooting tools. These tools are designed to simplify the rooting process by providing a user-friendly interface and automated procedures. They often work by exploiting security vulnerabilities in the Android operating system to gain root access. Some well-known one-click rooting tools include KingRoot, Magisk, and SuperSU.

1.2.2 Custom ROMs

Warning ⚠

Definition 1.2.1: When to flash a ROM

According to the article from Acer in section 1.2.3 this step comes after a Custom Recovery tool flashing. **It's probably NOT an alternative method to TWRP** as I was suggesting.

Flashing a **Read Only Memory (ROM)** is a process that allows users to install a custom operating system on their Android devices, enabling them to customize and enhance their device's functionality. TWRP is a popular custom recovery that plays a crucial role in this process. TWRP provides a user-friendly interface and advanced features that enable users to easily flash custom ROMs, create backups, and perform system-level modifications. It acts as a powerful tool

Chapter 1. Initial Steps

that facilitates the installation of custom ROMs on Android devices. Therefore, when discussing alternatives to TWRP, other custom recoveries like ClockworkMod (CWM) or PhilZ Recovery can offer similar functionalities.

How do we ensure compatibility with this specific Acer Tablet beforehand?

1.2.3 Developer-Provided Tools

In some cases, the manufacturer or developer of your Acer device may offer their own tools or methods for rooting the device. These tools are typically provided specifically for their devices and may offer a more reliable and supported approach to rooting.

[In this article](#), Acer itself mentions the use of TWRP but if you look at the Devices section on the TWRP [website](#), Acer isn't listed as one of the OEMs compatible. 🚫

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Part II

APPENDICES

Acronyms

ROM Read Only Memory. 4, 5

TWRP TEAM Win Recovery Project. 4, 5

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