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T-Mobile G1™ FOR DUMMIES®

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- **Browse the Web via 3G and wireless networks**
- **Install new applications from the Android Market**
- **Synchronize your Gmail, calendar, and contacts with Google's servers**

Chris Ziegler
Associate Mobile Editor, Engadget

T-Mobile G1™ FOR DUMMIES®

by Chris Ziegler

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About the Author

Chris Ziegler is a mobile enthusiast who can rarely be spotted using the same phone twice. Although his passions include driving, flying, motorcycling, and pretty much anything that involves gasoline, he's usually piloting nothing more than his own computer as Associate Mobile Editor for the technology blog Engadget. A native of Michigan, he currently lives in Chicago with two Macs, two PCs, and a pile of portable gizmos taller than he.

Dedication

To my fantastic parents, Brenda and Zig, for being far more patient and understanding than a son could ever ask a mother and father to be. I'd also like to thank Ryan Block for taking a chance on an unknown who'd never written a line of prose in his life; he put my career on a wild new path.

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We're proud of this book; please send us your comments through our online registration form located at http://dummies.custhelp.com. For other comments, please contact our Customer Care Department within the U.S. at 877-762-2974, outside the U.S. at 317-572-3993, or fax 317-572-4002.

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Introduction

I'd like to take this opportunity to welcome you to *T-Mobile G1 For Dummies*. Regardless of whether you have recently purchased a G1 and need help getting started, are a seasoned professional looking for a quick refresher, are considering purchasing a G1 and would like to get a feel for what the device is all about, or just need to know what a G1 *is*, you've come to the right place.

In a nutshell, the G1 is a state-of-the-art cellphone developed by Google, HTC, and T-Mobile that features an expansive touch screen, a full keyboard, navigation capabilities, and a whole lot more. It connects to both Wi-Fi networks (like those found in homes and offices) and also to T-Mobile's own high-speed data network to offer you speedy access to e-mail and the Web no matter where you happen to be.

Of course, a phone as amazing and feature-packed as the G1 is far more than just a phone — it's an administrative assistant, a PC away from your PC, a movie theater, a jukebox, a mobile office, a gaming partner, and pretty much everything in between. This book shows you how to integrate the G1 into every part of your life (or only some parts, if you prefer!) and how to get the most out of it every step of the way.

The G1 is also the very first phone to be released using Google's Android software, which is a standard operating system that many phones from different manufacturers and wireless carriers will use. This approach has several notable advantages, but most importantly, it means you'll be able to take much of the knowledge you discover throughout your journey with the G1 with you should you move to other Android devices down the road. Standardization: Anyone who's migrated between several BlackBerrys, Windows Mobile devices, or even Windows-based PCs will be able to appreciate the benefit of that!

I cover the fundamentals of Android and the G1, but I also show you great tips and tricks along the way. Read the book cover to cover if you like, or read just the sections that interest you most — either way, you can expect to find some cool tidbits that make the G1 an even handier gadget than you thought it was.

About This Book

T-Mobile G1 For Dummies can be read from beginning to end, either with or without a G1 in front of you. If you happen to have a G1 handy, that's great because you'll be able to follow along with the many examples. But if you don't have a G1, you'll end up with a great idea of how it works for both simple and more complex tasks. (You can think of this book as the ultimate buyer's guide!)

The book also makes a great reference that you can quickly consult time and time again. And because the G1 runs the standard Android platform, many of the book's concepts will remain useful if you decide to move on to another Android-based phone in the future. Who knows — you could be passing *T-Mobile G1 For Dummies* down to your great-grandkids someday.

Conventions Used in This Book

Here are some conventions I hope you'll find useful:

- The G1 has *buttons* below the screen. When I ask you to *push* a button, I am referring to one of these buttons on the phone.
- The G1's screen will show *icons* at times. If I want you to activate an icon, I ask you to *touch* it.
- You can *swipe* the G1's screen by moving your finger across it. I'll occasionally ask you to swipe to perform an action on the G1.
- *Flicking* is similar to swiping but your finger loses contact with the screen while your finger is still in motion. Flicking causes the G1's screen to continue scrolling for a bit — handy for rapidly moving through pages of information.
- The keyboard that comes with the phone has, well, *keys*. You *press* a key.

What You're Not to Read

If you've already powered on your G1, connected it to your Google account, and feel comfortable with the basics of navigating between screens and screen items, you can safely skip Chapters 1, 2, and 3. If you feel comfortable with call handling and text messaging, that means you're ready to dive into the G1's applications, and you can move right past Chapter 4.

Foolish Assumptions

Because you bought this book, I figure that you fall into one of three categories:

- **You've already purchased a G1.** Now you're looking to maximize your investment, find out a little more about what Android's all about, and pick up a few tips and tricks along the way. If so, congratulations — by choosing this book, you've made *two* smart choices!
- **You haven't taken the plunge yet but want to find out more about whether Android and the G1 are right for you.** I call the members of this group the "on-the-fencers." This book does an excellent job of spelling out Android's capabilities and how the G1 can fit into your life with its advanced e-mail capabilities, Web browsing, music support, and much more.
- **You don't know enough to recognize what Android is but do realize that what's good in your PC must be good in your pocket, too.** It turns out that you're absolutely right!

Regardless of what category you are in, you need an answer to a burning question: What does Android offer you? I'm going to try my best to get that answer to you in this book, and to start, it helps to understand where Android came from, what it is, and where it's going. I'm going to explore all that great stuff in Chapter 1. And don't worry — you'll be checking Gmail like a pro on your G1 in no time!

How This Book Is Organized

T-Mobile G1 For Dummies is organized into five themed parts, and each part is further subdivided into chapters covering individual topics.

Part 1: Introducing Android and the T-Mobile G1

Part I goes over the fundamentals by describing what Android is all about, why it's good for you, and how it ties into the G1. You find out about the G1's physical features, its capabilities, and how to make your first phone call. This is a great place to start if you're brand-new to the phone or trying to decide whether to take the plunge.

Part II: Putting the "Google" in Google Android

Google was deeply involved in the creation of the G1 and its software, and Part II goes over the fruit of that labor. All the things you love about Google on your desktop are in here: Gmail and Contacts, searching the Internet, Google Maps, Calendar, and more. Be careful, though — Google Maps on the G1 is a fun and *extremely* addicting pastime, so you could be spending a while on this part just for kicks!

Part III: Making the G1 a Part of Your Life

Part III shows you how the G1 can become a true mobile companion, putting music, pictures, and a great Web browsing experience right in your pocket. I also take a look at the IM application for keeping in touch with friends using instant messaging accounts, YouTube for accessing a vast library of entertaining videos on the go, and — for truly customizing the G1 and making it your own — the Settings application.

Part IV: Adding Software and Media

In Part IV, I show you how the G1 manages your data. You see how to add to your phone the music that's already have on your computer. In fact, the G1's music capabilities are so well-honed that it includes the Amazon MP3 program so you can purchase new tracks right on the device. (I show you how to use it, but keeping your spending in check is up to you!) I also get into Android's management of applications that you might install, how to delete them, and how to effortlessly get new applications through the Android Market.

Part V: The Part of Tens

Part V gets into some must-have apps, games, and accessories that'll make your G1 experience even cooler than it already is. I also throw in some sites you can visit to find out more about all the happenings in the fast-paced world of Android.

Icons Used in This Book

These are the time-savers and the eye-wideners. Watch for Tip icons to discover neat features, functions, and capabilities of your G1 that many users may not know.

When you put down *T-Mobile G1 For Dummies*, are you going to remember everything you've read verbatim? No, probably not. In fact, I'd be concerned if you did! These icons point out key takeaways that you'll want to put in your back pocket because you're likely to run into them down the road.

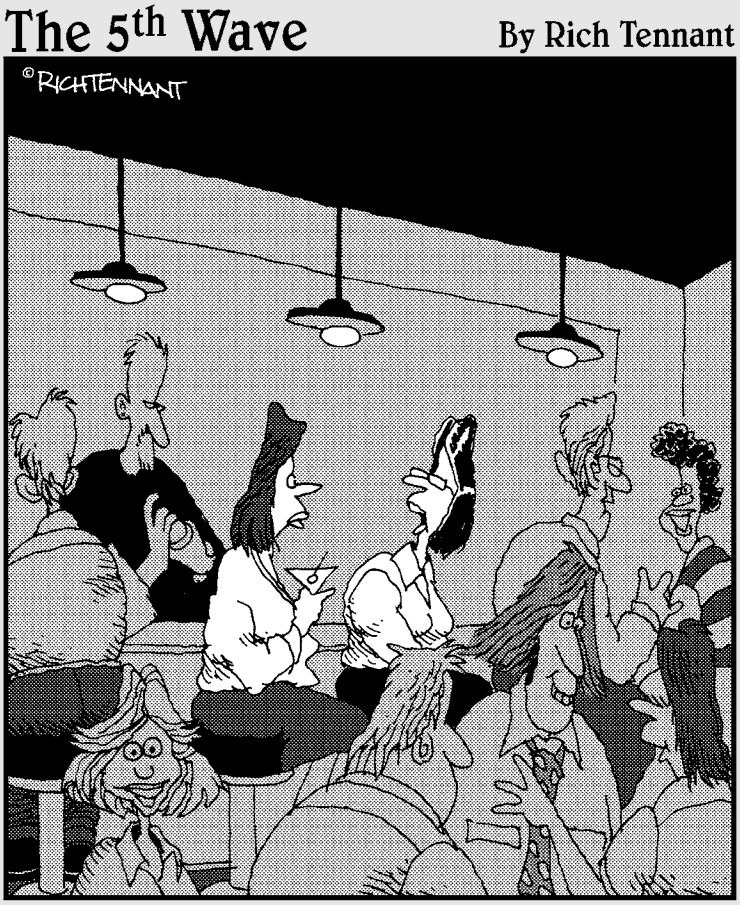
Take heed when you see one of these icons because the advice you find here could save you from some strife.

Where to Go from Here

Are you ready to read up on the most powerful phone you've ever seen? If so, let's move right into Chapter 1 without further ado, where you'll find out a little about the history of Android, what makes Android so cool, and why the future's looking bright for the T-Mobile G1.

Part I

Introducing Android and the T-Mobile G1



"He seemed nice, but I could never connect with someone who had a ringtone like his."

In this part . . .

Generally speaking, the best way to master a smartphone like the G1 isn't to dive right into the music player. (Well, maybe it's the best way if you're really into Depeche Mode and not so much into making phone calls, but I'm trying to cover the majority here.) I get things off on the right foot by talking a little bit about Android's past, present, and future in Chapter 1 and showing you the G1's physical features in Chapter 2. In Chapter 3, you find out about the Home screen (as the name implies, you'll see this screen a lot). I wrap things up in Chapter 4 with a thorough discussion of calling and text messaging.

Chapter 1

Google: What's Good in Your PC Is Good in Your Pocket

In This Chapter

- Making the connection between Google, Android, and the G1
- Reading a quick history of Android's creation
- Finding out what makes a smartphone, a smartphone
- Understanding how Android differs from the competition
- Companies and devices supporting Android

Few companies in the world enjoy the overwhelming name recognition that Google does. And why shouldn't it? Many people consider Google's Web search to be the gateway to the Internet itself, a portal to absolutely anything they're looking to find. Google applications (Gmail, YouTube, Google Talk, Documents — the list goes on) are often essential tools for business and pleasure alike. Indeed, chances are good that you and people you know have their browser's home page set to `www.google.com`.

For many people, e-mail and the Web are essential elements in their daily lives. And now we can add a new addiction to another marvel of technology — a marvel whose sophistication and dominance now rival that of the Internet itself — the cellphone. This diminutive device travels everywhere to keep people connected to friends, family, and (unfortunately) the office. In some cases the cellphone has taken the place of the old-fashioned wired telephone line. Modern cellphones rival the computing power of full-fledged desktop computers from just a decade ago, and some data services make it possible to use the Internet on a cellphone at speeds that give at-home broadband connections a run for their money. The possibilities are endless.

So what is Android? (Drumroll, please.) It's a Linux-based smartphone operating system that can run on all sorts of phones. It just so happens to be a particularly cool operating system with some interesting features and an incredible cross-section of industry and community support. At its core, however, Android is simply an operating system.

More importantly, Android is the operating system that powers the T-Mobile G1 — in fact, the G1 is the very first Android-powered phone to be sold anywhere in the world! For you, that means your wireless companion benefits from everything Android has to offer. Hang on — it's going to be a fun ride.

Unveiling Android the Google Way

For some time, Google has recognized the power of the cellphone. In fact, did you know that Google has tailored versions of its home page for different devices? It also makes mobile Gmail, Maps, and other programs available for free to users of a variety of phone models. Any iPhone owner can tell you how helpful Google Maps is in your pocket or purse — especially when you're trying to track down the address of that killer Chinese restaurant across town.

But, like any good company, Google isn't content to rest on its laurels. Making a Web page that fits on your cellphone's screen is a worthy task, but Google knew that it could do more. In 2005, it purchased Android, a Silicon Valley start-up company that had been quietly and secretively working on creating software for the next generation of cellphones. The company continued working in stealth mode under Mother Google's watchful eye until November 2007, when Android was officially unveiled to the world.

Google makes Android available for free, like most of its products. At first glance, this doesn't seem like a healthy way to turn a profit, but Google has a plan. The company recognizes the importance of cellphones (and more generally, anything that fits in a pocket and can connect to the Internet) in its business strategy in the coming years; with Android, the company has its own platform for deploying Google-branded services without having to deal with other vendors.

Google looks at Android as yet another way to suck you into the bountiful Google ecosystem of products and keep you there — and for anyone using Gmail or Maps on a daily basis, that's not a bad thing at all.

What Android Is (and Is Not)

Just like your desktop or laptop computer, your cellphone — no matter how big or small — runs an operating system. The operating system is the brain of your phone: the software that "talks" to the phone's processor and other hardware, manages memory (you have to put those ringtones *somewhere*, right?), and allows applications (such as mobile Web and e-mail apps, music players, and games) to do their thing.

This tiny operating system varies significantly from phone to phone and from manufacturer to manufacturer. Cellphones broadly fall into one of two categories based on the kind of operating system they use: plain ol' phones, which are sometimes playfully called *dumbphones,* and *smartphones,* which can be expanded. The line between the two is blurry and can change slightly depending on who you ask, but the distinction is important nonetheless.

The dumbphone

Regular phones are devices built from the ground up with a certain set of capabilities in mind, and the options for expansion beyond that are limited. In a way, you can think of their operating system as a walled fortress with no entrance or exit; the manufacturer (sometimes in cahoots with your wireless carrier) decided what software would be allowed to run when the phone was created, and that's that. You may have limited capability to add games or small applications, but these items are usually limited in what they can do because the operating system restricts them.

You might be saying "Down with dumbphones, then — let's move on to the good stuff!" Hold on for just a second, though; it's not all doom and gloom. Most phones sold today, such as the Motorola RAZR and LG Chocolate series, are in this category, and just because their capability for expansion is limited doesn't mean they're not already capable devices. Here are some dumbphone advantages:

- **They're connected:** Many modern phones have support for e-mail; have full Web browsers; and can feed you with weather, news, sports scores, and more.
- **They keep you entertained:** Frequently, these phones offer music players, games, powerful cameras, and video playback.
- **They just work:** Because you can't install just any old application you want on these devices, they tend to be more stable and less buggy than smartphones. The manufacturer and network carriers can test every conceivable configuration of the software before it's sold to you and me.

See, dumbphones aren't so bad!

The smartphone

A *smartphone* is simply a cellphone with a standard operating system and a capability to create and install new programs. It frequently features advanced input systems, such as QWERTY keypads or large touch screens, and impressive features such as integrated GPS for mapping your location and Wi-Fi networking for speedy Web browsing and e-mail access. And, just like the

PDAs of yore, smartphones with the same operating system are often available from multiple manufacturers, making it easier to select the hardware that meets your needs and preferences.

At the end of the day, dumbphones are limited in what they can and cannot do, and that's what ultimately drove the creation of the smartphone. You can think of the smartphone as the spiritual successor to the personal digital assistant (PDA) — the Apple Newtons and Palm Pilots of the 1990s — combining a PDA's capabilities with a phone into a single, pocketable bundle of convenience.

This list describes a couple of benefits that made those PDAs so useful:

- **They were "open" for development.** Hobbyists and giant corporations alike could create their own software for the devices and then distribute those applications to the world. If you wanted a better note-taking program, for example, odds are someone had already created one that you could buy or, in some cases, download for free.
- **The experiences were consistent across devices.** If you didn't like Palm's hardware, you could go buy a Sony Clié — but you didn't have to relearn everything about using it because it still used the Palm OS. Similarly, you could switch between a Casio Cassiopeia, an HP Jornada, and a Compaq iPAQ with aplomb because they all ran Microsoft's Pocket PC platform.

It wasn't all fun and games, though. Early smartphones, such as Handspring's Treo 180 and 270, were compromises. They were neither great PDAs nor stellar phones, frequently forcing users to purchase separate, dedicated, simpler dumbphones for those times when PDA functionality wasn't necessary to have around.

Over time, though, manufacturers have expertly and seamlessly integrated the two devices into a single experience. Battery life is less of an issue than it ever has been (although, to be honest, there's no such thing as *too much* battery life). The inclusion of sophisticated word processing, spreadsheet, and presentation applications have made it possible to take short business trips without hauling the laptop along. In fact, smartphones — once designed for and used almost exclusively by businesspeople — have become so easy and fun to use that they're now frequently marketed to and used by college students, stay-at-home parents, and everyone in between.

And then came Android and the G1

Historically, the still-young smartphone operating system market has been dominated by heavyweights Windows Mobile (owned by Microsoft), Symbian (supported by a consortium of phone manufacturers), and

BlackBerry OS (owned by RIM), with the Apple iPhone's special flavor of Mac OS X more recently shaking the boat. Smartphones are really nothing more than pocket-sized computers, and to a certain extent, the software reflects this: Windows Mobile is a scaled-down version of Windows, and the iPhone runs a lightweight version of the Mac's operating system.

Hmm — Windows and Mac. I sense a pattern here. Sure enough, the same fight for operating system dominance in the PC industry is being waged on a smaller scale on your cellphone. Linux is in the thick of things, too, although no one has managed to create a popular, widely used smartphone operating system that's based on it — and that's where the Android-powered G1 comes in.

Recognizing What Makes Android Unique

With established players such as Windows Mobile already running on all sorts of great, capable phones in the marketplace, fair questions to ask are, "What makes Android any different, and why would you choose it?" Or if you work in an organization where the G1 was provided to you, you might be wondering why *they* chose it?

First, I want to get the "X factor" out of the way — that subjective preference for one product's look, feel, and reputation over another's that has separated Mac users from PC users, Ford buyers from Chevy buyers, and Spartans from Athenians for thousands of years. Similarly, some die-hard BlackBerry users cannot be convinced that an Android phone such as the G1 could ever do the job, and hey, that's just fine. Different strokes for different folks, I always say.

Here are some of the unique features that set Android apart:

- **Android is tightly integrated with Google products.** One great thing Android has going for it is its extremely (and I do mean *extremely*) tight integration with much of what Google has to offer. For true Google junkies, this integration could be a deciding factor. Sure, Google offers many of its services to other devices, but none can claim to ooze Google from every nook and cranny the way an Android device does. As an example, Google Maps offers an almost desktop-like experience on Android, right down to Street View support. And the G1 offers one advantage that Google Maps on your desktop never can: You can take it with you.

- **Android is thoroughly modern.** It's the only mainstream smartphone operating system out there now with that new-software smell. It may be an unfair advantage, but as the new kid on the block, Android inherently gets to lay claim to the title. In practical terms, this doesn't mean terribly much, but you can expect Android to be best equipped to take advantage of today's most advanced mobile hardware — like the G1, for instance.
- **Android enjoys massive support from the developer community.** In other words, if you are looking to add a particular application to your phone, odds are very good that the app already exists, is under development, or at the very least is on a developer's mind somewhere in the world.

The list doesn't stop there, though. Like Windows Mobile, Android enjoys a terrific level of device independence, meaning that you can expect to see it running on all sorts of phones from different manufacturers soon. Believe it or not, that's a great thing for you and your G1: The more people who are using Android, the more companies that will embrace it — and that means more software and more support for everyone.

From an employer's perspective, there's a lot to love about Android, too. Android-powered phones will eventually offer true support for Exchange Servers, the Microsoft-supplied e-mail and scheduling systems used by many of the world's companies. Google also allows manufacturers and carriers to lock down their phones, meaning they can be configured so that no additional software can be added without approval: This restriction is no fun for the user, granted, but it avoids a potential support nightmare for companies looking to deploy hundreds or thousands of units.

Adding the Hardware Component

As huge as Google is, it still can't act unilaterally. No company in the world can create a brand-new smartphone platform and expect phones using it to magically will themselves into existence. Far from it, in fact; it takes a small army of big names to give an initiative such as Android a fighting chance in a world dominated by Microsoft and Apple — and a small army is exactly what Google has cobbled together.

The Open Handset Alliance

If Android itself is the king showing on the table, the Open Handset Alliance (OHA) might be the ace up Google's sleeve. Concurrently with Android's announcement in 2007, Google revealed that it had already secretly convinced tens upon tens of the world's largest manufacturers, network