

Originally published in Law Office Computing

## Palm's Tungsten C PDA

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It is the best of PDA's. It is the worst of PDA's. No, just kidding. It is not the worst, far from it. Palm has produced an impressive PDA in the Tungsten C, arguably the best on the market from a business perspective. But, for reasons, best known to Palm, while pushing the PDA technology envelope strongly in some places, the Tungsten C overlooks some existing technology that would substantially enhance the Tungsten C, particularly in the areas of multimedia and entertainment use.

**The Good.** The Tungsten C has the power of a desktop computer of just a few years ago. The C comes with 64 MB of RAM, an Intel PXA255 processor running at 400 Mhz. and a new and improved 320 x 320 transfective color screen that produces a clear and vibrant color display. This is the best and brightest display I have seen from Palm to date. The Tungsten C comes with a built in thumb board (you can connect a full-sized fold up keyboard as well). It also accepts Graffiti entries, which you make on the screen itself, as the device has no separate Graffiti entry area, due to the presence of the thumb board. (Actually, it accepts Graffiti 2, a revision of the old

Graffiti that makes it a bit more like normal writing. If you start with Graffiti 2, you may find it easier to learn than Graffiti; but if you are used to Graffiti, you will have some conversion pain). In truth, you will find less and less reason to use Graffiti 2 as a result of the presence of the thumb board, which, after a bit of practice, allows for substantially faster information entry. Although reduced in size to accommodate the thumb board, the Tungsten C retains the 5-way navigator button introduced by Palm in its Tungsten T PDA.

The C runs Palm's newest operating system, Palm OS 5.2.1. It also utilizes Palm's 4.1 desktop software and offers compatibility with Windows 98 and later and with Palm OS X (10.1.2 and later).

Palm claims that the supplied rechargeable 1500 MAh Lithium Ion/Polymer battery will last for six days of average handheld use or one day with consistent Wi-Fi connection. While use will differ from person to person, I have had the battery in mine go for almost 6 full days without requiring a recharge during what I consider normal usage for me. I have found that Wi-Fi use does burn the battery far more rapidly. You should anticipate about 5 hours of power with constant use of Wi-Fi. By comparison to other PDA's I have used, The Tungsten C offers reasonable power between recharge requirements. You can recharge the battery through the supplied AC adapter/cradle or through optional accessories such as a DC charger for your car or a USB charger that plugs into your computer's USB slot.

Recognizing the need for connectivity, Palm built the C with Wi-Fi compatibility. It recognizes 802.11b networks and joins them with relatively little difficulty. Once connected, you have the ability to synch up to a networked computer or to get into email or surf the web.

The Tungsten C accepts Secure Digital and Multimedia expansion cards for additional memory and other features and also has the Palm Universal connector for attachment to other devices and for synchronization.

The Tungsten C comes with a good collection of software, suitable for many business uses. A partial summary of the software package

includes the traditional desktop and PDA versions of address, calendar, to-do memo and synchronization functions, Dataviz' Documents to Go Professional edition 5.1, for viewing and editing documents and spreadsheets as well as handling PowerPoint files. It also includes PrintBoy for printing to your networked printer via Wi-Fi and Chapura Pocket Mirror (syncs with Outlook). The Tungsten C comes with a variety of communications software, including Wi-Fi connectivity support, email service, Internet access and browser software. On the entertainment side, it includes games, such as Handmark's Solitaire, Palm Reader, as well as Palm Photos and Kinoma Player and Producer (video playback).

**The Bad.** Palm offered Bluetooth compatibility as an add-on to its M505 and M515 devices. Its Tungsten T and now its Tungsten T2 PDAs came with Bluetooth connectivity built into the unit. In the Tungsten C, Palm has provided built in Wi-Fi compatibility, but not Bluetooth and, at least as of the present time, the Palm Bluetooth SD card that works for the M505 and M515 units, does not work with the Tungsten C.

The display, while substantially improved by comparison to older Palm units, still falls short in comparison to the display on the top of the line Sony Clie units.

The Tungsten T2 offers built in recording capabilities. The Tungsten C is only "digital recording ready". To record a memorandum or a letter or a note, however, you have to purchase the separate, optional headset unit, as the Tungsten C has no built-in microphone.

While there is software to allow playback of MP3 Music files, you need to use an external card to store such files for playback. Worse yet, the C comes with an on board speaker that is mono only AND has a standard earphone jack that accepts (you guessed it) only a mono earphone. I can understand Palm deciding to make MP3 playback optional on a machine designed primarily to satisfy business needs; but I cannot comprehend the decision to make its best and most powerful unit with only a mono jack and not a stereo jack for MP3 playback.

**The Ugly.** The Tungsten C lacks the clever design and sleekness of the Sony PEG NX70V or even Palm's own Tungsten T/T2. It has a sort of chunky/clunky appearance that reminds me of the older Palm devices modified by the introduction rounded edges, the thumb board, the navigator button and the rounded bottom for the universal connector. Palm delivers the C with a slide in flip over front cover reminiscent of those that came with the Palm V and the M505/515 units, except that the cover for the Tungsten C tends to slide out of the track that holds it very easily. I am still looking for a good alternative case from Palm or a third party manufacturer.

**Closing Argument:**

The Palm Tungsten C has computing power to compare to the top Pocket PC units, but runs Palm's OS 5, allowing it to take advantage of newer and more powerful programming for the Palm platform as well as enabling it to run most of the existing software in the Palm universe. Add to that its built-in Wi-Fi and you have a powerful business tool that handles traditional PDA functions as well as more demanding programs. The Tungsten C's computing power and fast processor allow it to function quite well in the game department and its new transfective color screen displays graphics and pictures very well. The requirement of a separate headset for recording purposes is not a convenience, but something we can live with. I cannot imagine that anyone would want to use the mono music playback capability, except in an "emergency". As a business tool it gives you just about all you need or could ask for (Bluetooth would be a nice addition though).

**The Verdict:** If you only need (or want) to keep track of addresses and calendar information, but would like to store some pictures, occasionally play a game and listen to music, you have better options. If you want more computing power, faster operations, and Wi-Fi connectivity, you will want to invest in the Tungsten C. For business use, Palm's Tungsten C is the PDA to beat.