

Test Drive Report for the palmOne Zire 72

Compared to the Zire 71, the Zire 72 offers more features, including Intel's 312MHz PXA270 processor, a higher resolution (1.2 megapixels) built-in camera, and added Bluetooth support.



Front View: 1. Application/programmable button 2. 5-way Navigator 3. Power status

indicator



Rear View: 1. Built-in camera 2. Reset



Top View:

1. Stylus
2. 3.5mm headphone jack
3. Power button
4. Infrared port
5. SD slot



Bottom View:

1. Power supply port
2. USB synchronization port



Right: 1. Stylus



Left: 1. Voice memo activation button

Exterior Design

Simply speaking, the Zire 72 soldiers on with the exterior design of the Zire 71, but makes a number of changes that aren't that difficult to spot.

The 72 is still built in blue, albeit deeper and brighter than that on the Zire 71, and very different all at the same time. The paint on the latter is somewhat grainy, while the Zire 72 feels very smooth but not slippery.

Beside the original blue edition The Zire 72 is also available in silver special edition.



Unlike the Zire 71, the rear surface of the Zire 72 is no longer as dull as paper, as the built-in camera is housed in a mesh grill that contains the microphone and speaker as well. All the edges are all designed round for increased comfort.

Different from the Zire 71's joystick-like design, the Zire 72 goes back to the 5-way Navigator this time. The 5-way Navigator is actually the same as the Tungsten E in terms of design and function. The four programmable/application buttons flank the 5-way Navigator, two on each side. Each of them is wide enough even for individuals with larger fingerprints, so they feel more than ok. These buttons are by default, set to launch the Calendar, Contacts, Camera, and RealOne player, just as the icons on the buttons imply. As always, you can reassign them based on your own preferences.

Like the Zire 71, the Zire 72 also places its power button along the top. Since the Zire 72 supports audio recordings, a shortcut button for the Voice Memo program is placed on the left. Pressing the button doesn't get things entirely started, as you still have follow other on-screen operations to start recording.

The Reset button along the rear can be reached and depressed easily with the help of the included stylus.

Looking at the top again, we see the aforementioned power button, an Infrared port, a 3.5mm headphone jack, an SD slot, and a stylus silo. As the stylus is relatively big, it is not completely hidden within the handheld by design, with one side of the stylus still visible.

The black stylus is a simple piece of plastic, but works fine so it doesn't warrant too much explanation as long as a variety of hands can comfortably grip and complete tasks with it. The plastic extrusion process has left a few rounded cut-off points which aren't all that pretty, but are common in plastic extruded products.

For size and weight, the Zire 72 is quite the same as the Zire 71. It measures 4.6 x 2.95 x 0.67 inch and weighs 4.8 oz.

Amongst the Zire 72 accessories is a carry case that seems very simple but practical. On the cover is the palmOne logo to remind you of what is in it. The little carrying case will keep your Zire 72 looking new and protects its keys from being pressed from the outside so you don't have to worry about a thing when on the go.



Screen

The Zire72 incorporates a 320 x 320 resolution transreflective TFT color display good for 65K colors, which is standard issue equipment for current midrange Palm OS-based handhelds. the Zire 72's screen can display approximately 40% more content than the regular 320X240 screen.

When navigating through images and performing normal operations, the Zire 72 display seems to perform better than others of the same specs in terms of screen brightness and display quality.

Hardware Configuration

The Intel 312MHz PXA270 processor is used to power the Zire 72. Though it is the slowest model in the PXA270 lineup, it still contains the good features found in other PXA270 models. For example, if the Zire 72 is close to idle, the processor will automatically lower its frequencies to save power and extend battery life, something previous models in the PXA family didn't have. In addition, the PXA270 series processors have powerful multimedia processing capabilities allowing for smooth playback of audios and videos, and the ability to reproduce game imagery at high levels of detail. In general, the overall processing capability of the Zire 72 equals about 4 times that of the Zire 71.

Memory for the Zire 72 amounts to 32MB of built-in RAM, 24MB of which is available for users. In practice, 24MB memory is okay for Palm OS-based handheld users, allowing them to install programs and/or store data. Should you require more for any reason (multimedia most likely), the built-in SD slot is a handy solution for storage increases.

The SD slot supports SD cards and MMC cards, and SDIO devices. Wireless network access is but

an SDIO wireless adaptor away.



Camera

Certainly better than the VGA camera in the Zire 71, the new 1.2 megapixel camera in the Zire 72 will allow you to capture images at resolutions of up to 1280*960, with support for lower resolutions of 640*480, 320*240, and 160*120. Images taken with higher resolutions can be printed and placed into photo albums while lower resolution imagery are perfect for email or MMS service after the Zire 72 is connected to Bluetooth mobile phone. Better yet, the Zire 72 comes with a video recording program that will record movie clips at 320*240 or 160*120 with audio at 15fps.



Captured stills can be saved to the built-in memory or to the storage card according to your own settings/preferences, while movie clips go to the storage card only. The size of a 1280*960 pixel image in the Zire 72 is about 300KB. With a 128MB SD card, the Zire 72 will record movies in 320*240 with audio for about 100 minutes, and about 180 minutes in 160*120, again with audio.

Bluetooth and Networking

Bluetooth technology allows any two Bluetooth-enabled devices to exchange data at short ranges. The Zire 72 of course, has this convenient function built in by default. The preinstalled Bluetooth setting program will turn the Bluetooth connection on/off, set device names, and modify connection settings.

In the "Setup Devices" window, three wizards are provided: Phone Setup, PC Setup and LAN Setup. These wizards will request that devices such as mobile phones, PCs, or Bluetooth access points be connected to the handheld. If a mobile phone is connected, the mobile phone will act as a wireless modem for the Zire 72, allowing the user to use SMS and MMS services, as well as email and surf the Internet. A connection with PC will allow users to perform HotSync operations or directly exchange data via Bluetooth. When the Zire 72 is connected to a Bluetooth access point, users will also be able to access LANs or the Internet.



In the past, it was always very troublesome for the average user to set up connections between handhelds and mobile phones. It is good, then, that the Zire 72 has a very convenient preinstalled settings program that includes a good number of preset mobile phone models (such as the Nokia 3650, and Sony Ericsson T610) and several network service providers (such as T-Mobile and AT&T). If you find your mobile phone model or network service provider is not included in the wizard, you can download the latest 'phonelink update' from the official palmOne website, which contains connection settings for not only the current mainstream mobile phone models, but also a large portion of the network service providers in the world.



Even if your mobile phone does not provide Bluetooth support, you will still be able to fulfill most

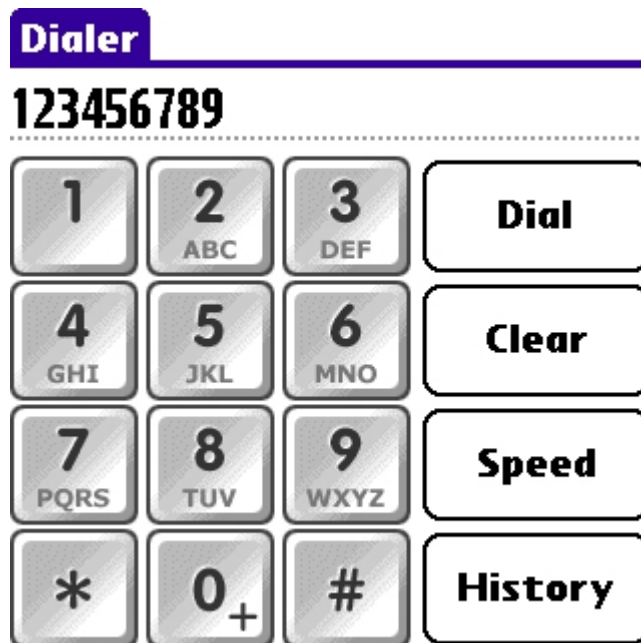
networking functions mentioned above via the Infrared port.

Software Applications

The OS used in the Zire 72 is the Palm OS 5.2.8, the same as the Tungsten T3 and Tungsten E. The midrange handheld is of course preinstalled with indispensable programs such as Contacts, Calendar, World Clock, Memos, Tasks, Calculator, Expense, Prefs, and Note Pad; as well as many practical programs including PalmOne Message, Documents To Go Standard Edition Version 6, VersaMail 2.7, PalmOne Web Pro 3.5, and Acrobat Reader for Palm OS. For PC synchronization, there is the Palm Desktop Windows and Mac.

Bluetooth

Connecting the Zire 72 to a mobile phone via Bluetooth or Infrared will allow direct utilization of the PalmOne Message for SMS and MMS services, or to dial phone numbers with the program instead of your phone.

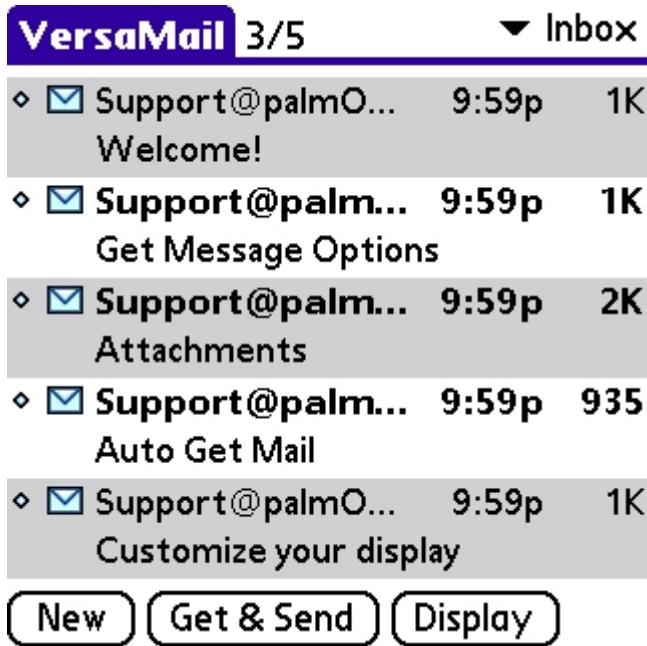


Documents to Go

The 'Documents to Go' Standard Edition Version 6 is a popular word processing program with Palm OS-based handhelds. What it does is to allow you to edit Word/Excel documents on Palm-based handhelds without ever having to change the original formatting with most Word/Excel functions intact in the program.

VersaMail

The VersaMail is a program similar to Microsoft Outlook Express on PC. Just connect your Zire 72 to the Internet, setup an email account; and you can start emailing with VersaMail. VersaMail supports emails in HTML format.



PalmOne Web Pro

The PalmOne Web Pro is a Web browser for Palm OS-based handhelds. It not only has various browsing modes to fit in the relatively low resolution screen, but also provides support for Cache, Cookies, and SSL. Simply connect the Zire 72 to the Internet, and you can visit just about any website you want through the Web Pro.



Acrobat Reader

Although the Acrobat Reader for Palm OS displays PDF documents on Palm OS-based handhelds, files must first be converted from normal PDF files into the custom Palm PDF format. The converted PDF files are actually optimized for clearer display on the low resolution screen

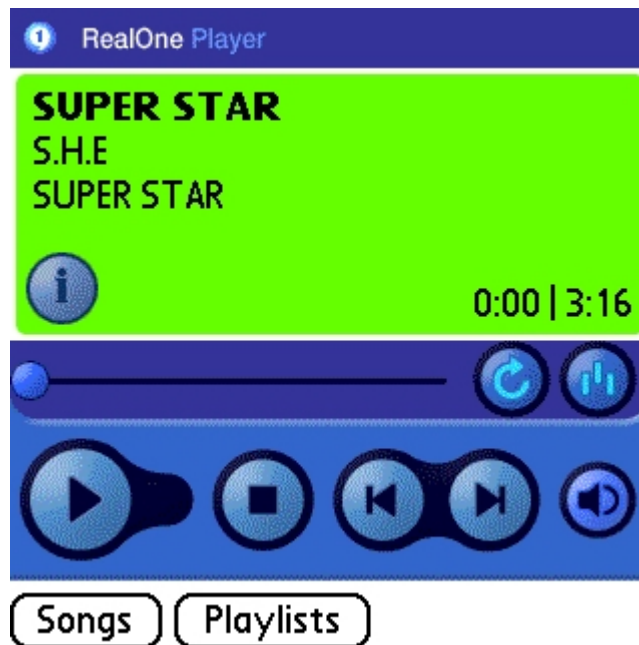
(compared to PC screens). After conversion, the original PDF document formatting and layouts may be altered to some extent, but are far better suited for handhelds.

Multimedia

RealOne Mobile

The RealOne Mobile Player imbues the Zire 72 with MP3 and Real Audio format audio playback ability. It will also automatically find music files stored on the storage card, and supports playlists as well as background music where it will play music when you are running other apps.

ROM can automatically turn the screen off after a set period of time to save power. If you run the program in the background, and there are no other active operations for long periods of time, the Zire 72 will automatically shut down once the preset system auto shutdown time is up. To avoid this, we remind music lovers to keep ROM onscreen.



Other

Video playback is provided with the default Media program that will play movie clips captured by the built-in camera and other videos in .asf format. We also tested the MMPlayer that is currently popular with Palm OS-based handhelds. For the moment, MMPlayer supports videos in MPEG1/2/4 and DIVX formats, and audios in MP3 and WAV formats. In other words, the MMPlayer supports most of the mainstream multimedia formats.

Thanks to the powerful processor, the Zire 72 propels movies with bit rates average for PCs without frame skipping or freezing.



Batteries

The Zire 72 is run on a built-in 950mAH rechargeable Li-ion battery that is not user replaceable. Operate the Zire 72 on PIM applications for 30 minutes per day, and the battery will power the handheld for about 1 week, which is more time than most will need to reach for the charger. But if you use the Zire 72 to watch movies or play games, the battery life will most likely be a whole lot shorter. According to our tests, the Zire 72 is good for 6.5 hours MP3 playback or 2.5 hours for video.

Benchmark Testing

The pBench 1.0 is a benchmark program used to test the processing capabilities of Palm OS-based handhelds from a number of aspects. This program provides results in percentages, with the results compared to the Palm m505 (Palm m505 results set at 100%).

pBench 1.0	
Arithmetics	490%
Heap Management	366%
Data Access	1721%
Graphics	1328%

The Palm OS Benchmark 1.0 is a program used to test the overall processing speed of Palm OS-based handhelds by calculating the time required by handhelds to complete uniform computing tasks. Zire 72 ends up with 6 (the less the better).

Speedy 3.4 is another benchmark program used to test the overall processing speed of Palm OS-based handhelds, including a processing test, memory test, and graphics test. Scores given reflect speed, and therefore power in completing uniform tasks. The Zire 31 scored 1744.

Benchmark 2.0: Again, a benchmark program used to test the overall computational speed of Palm OS-based handhelds. Like pBench 1.0, it also provides scores in percentages, but the benchmark is the Palm IIIe/IIIxe. Zire 31 achieved a 428%.