News release

vodafone

17 November 2005

Vodafone K.K. releases the V604SH with 3.2 megapixel camera

Vodafone K.K. today announces that on 19 November 2005 it will commence nationwide sales of the V604SH PDC (2G) entertainment model by Sharp, which features a 3.2 megapixel mobile camera with 2x optical zoom and auto focus, along with an analog TV tuner.

The V604SH features a host of entertainment functions such as a high-quality, wide-angle view, large-size 2.4-inch Mobile ASV LCD, 'Custom Screens' for menu screen and icon customisation with popular characters including ones from Disney, a Music Player that supports AAC and SD-Audio MP3 music files for listening enjoyment and a 'Motion Control Sensor' that responds to movements for new mobile gaming experiences.

The main features of the V604SH are as follows:

- Best-in-class*1 3.2 megapixel camera with 2x optical zoom and auto focus
- Integrated analog TV tuner with recording and still image capture functions^{*2} that allow customers to save TV programmes and EPG (Electronic Programme Guide) function that can be used to check favourite programmes for superior TV viewing
- Full range of entertainment features: 'Custom Screens' for customisation with popular characters, 'Motion Control Sensor' that responds to movements, Music Player for music track enjoyment

For more information on the V604SH, please see the attached appendix.

- *1: As of 17 November 2005, in the Japanese market (according to Vodafone K.K.).
- *2: Captured images cannot be copied, edited, sent by mail, played back on other mobile phones or set as wallpapers or ring tones.

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- The V604SH operates on Vodafone K.K.'s PDC network and is for use only in Japan.
- Chaku-Uta® is a registered trademark of Sony Music Entertainment Inc.
- miniSD is a trademark of the SD Association.
- QR Code is a registered trademark of Denso Wave Incorporated.
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- Java and Java-based trademarks and logos are trademarks or registered trademarks of Sun Microsystems, Inc. in the U.S. and other countries.
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- V-appli compatible handsets are powered by JBlend™, developed by Aplix Corporation, to speed up the execution of Java™ applications.
- V-appli is a trademark of Vodafone K.K.
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About Vodafone K.K.

Vodafone K.K. is a leading mobile operator in Japan with nearly 15 million customers and a subsidiary of Vodafone Group Plc, the world's largest mobile community. The Tokyo-based company offers a wide range of sophisticated mobile voice and data services including Vodafone live!, which provides mail and internet access to 85% of its customers, and pioneered the picture messaging service called Sha-mail first introduced in November 2000. In December 2002, Vodafone K.K. launched the world's first commercial 3G W-CDMA service based on 3GPP international standards. Vodafone K.K.'s 3G service offers its customers rich content and roaming in 128 countries and regions on 177 networks. For more information, please visit www.vodafone.jp *Above data is current as of 31 October 2005.

Vodafone V604SH (by Sharp)

1. Main Features

- Best-in-class* 3.2 megapixel camera with 2x optical zoom and auto focus

The V604SH's best-in-class^{*1} 3.2 megapixel mobile CCD camera can bring both the foreground and background clearly into focus with its 5 high-performance aspheric glass lenses. The handset can be enjoyed like a true digital camera, thanks to the combined optical and digital zooms, which make it possible to take photographs at a max. approx. $50x^{*2}$ zoom and the 'Swivel Style' design that allows the LCD screen to be reversed 180 degrees for use as a large view finder.

- Integrated analog TV tuner with recording and still image capture functions that allow customers to save TV programmes and EPG (Electronic Programme Guide) function that can be used to check favourite programmes for superior TV viewing

The V604SH comes equipped with a terrestrial analog TV tuner so customers can check TV programmes while one the go, as well as listen to FM radio broadcasts. Customers can enjoy their favourite programmes and music a number of times by using the recording and capture functions to save programmes and FM radio recording function. The handset is also compatible with EPG, which allows customers to look-up and read about specific programmes. In addition, the V604SH features a high-quality, wide-angle view, large-size 2.4-inch Mobile ASV LCD for superior TV viewing.

- <u>Full range of entertainment features: 'Custom Screens' for customisation with popular characters, 'Motion Control Sensor' that responds to movements, Music Player for music track enjoyment</u>

The V604SH features a host of entertainment functions like 'Custom Screens' for menu screens and icons that can be customized with popular characters including ones from Disney, a 'Motion Control Sensor' that responds to movements for new mobile gaming experiences, and a Music Player* that supports AAC and SD-Audio MP3 music files for listening enjoyment.

*Music Player requires music key download (charged) for listening to SD-Audio MP3 music files.

^{*1:} As of 17 November 2005, in the Japanese market (according to Vodafone K.K.).

^{*2:} For 120 x 160 pixels sized photographs.

^{*}Depending on the usage environment, TV visuals or audio may encounter static and in some cases may not be received.

^{*}Communications charges apply to use EPG.

^{*}Captured images and recorded TV or music cannot be copied, edited, sent by mail, played back on other mobile phones or set as wallpapers or ring tones.

2. Main Specifications

| Main Opecinications | | |
|---|-----------------|--|
| Size (Width x Height x Thickness) | | Approx. 50 x 103 x 26mm (when folded, excluding antenna protrusion) |
| Weight | | Approx. 144g |
| Continuous talktime/standby time | | Approx. 130 min. / approx. 450 hrs. |
| TV/FM radio viewing/listening time | | Max. approx. 60 min. (after full battery charge) |
| Display | Main | 2.4-inch (240 x 320 pixels) Mobile ASV LCD (max. 260,000 colours) |
| Display | Sub | 1 line, 6 full characters (12 x 72 pixels) monochrome LCD |
| Mobile camera | Pixels/Type | 3.20 million effective pixels/CCD |
| | Zoom | Max. approx. 50x (2x optical zoom, 25x digital zoom) |
| | Max. photo size | 1,536 x 2,048 pixels |
| Full-screen character display (full size characters when displaying received mails) | | 56 characters (8 characters x 7 lines) / 64 characters (8 characters x 8 lines) / 80 characters (10 characters x 8 lines) / 156 characters (12 characters x 13 lines: standard size) / 225 characters (15 characters x 15 lines) / 400 characters (20 characters x 20 lines) |
| Max. mail capacity (received/sent) | | 3,000 / 1,040* |
| Max. photo capacity (no. of photos) | | 12MB shared (max. approx. 2,040*) |
| External memory | | miniSD [™] memory card (32MB included) |
| Polyphonic ring tone voices | | 64 |
| Other main functions | | V-appli (256K Appli Ver. 2), Chaku-Uta [®] , Automated mail response, V-kara Mobile Karaoke Ver. 2 (with points function), Anti-spam mail, Bilingual menus, Weather indicator, IrDA, QR Code reading/composition, Predictive text entry (Keitai Shoin 3) |
| Color variations (pictured) | | Turquoise & Black, White & Silver, Black & Red |
| | | |

^{*}Saving capacity depends on file sizes.

3. Retail Price (standard set): open price

Standard set includes mobile handset, battery pack, rapid charger, stereo earphone mic with TV antenna, L-type video output cable, miniSDTM memory card (32MB) and miniSDTM memory card adapter

4. Availability

From 19 November 2005

V604SH

(Manufactured by Sharp)



From Left: Turquoise & Black, White & Silver, Black & Red