

23 March 2006

## **Vodafone K.K. unveils V604T with analogue TV and FM radio tuners**

*2G handset also features large font displays, easy operations and functions to prevent overuse*

Vodafone K.K. today announces the development of the V604T by Toshiba, a new PDC (2G) handset that features a terrestrial analogue TV tuner and a separate, dedicated FM radio tuner. The V604T is scheduled to go on sale in late April 2006.

The V604T's "TV View Style" enables customers to automatically activate the TV tuner by rotating the main display back 360 degrees while holding down a central side button. The V604T also comes with a "TV Rod Antenna" that can be positioned to any angle so customers can get the best possible TV picture\*<sup>1</sup>. For FM radio listening in stereo, the V604T is equipped with a separate, dedicated FM radio tuner. In addition to memory settings for FM stations in all of Japan's 47 prefectures, the V604T supports digital tuning so customers can tune channels to the nearest 0.1MHz. The handset also comes with full-fledged features for music enjoyment, including a music player for listening to tracks transferred from PCs to memory cards\*<sup>2</sup> (sold separately) and stereo twin speakers. Furthermore, the V604T is great for people new to mobile phones and mature users. "Simple Mode 3" has large fonts and easy-to-use operations, while "Limit Mode" prevents overuse.

The main features of the V604T are as follows:

- "TV View Style" and "TV Rod Antenna" for comfortable analogue TV viewing
- Dedicated FM radio tuner for enjoying FM radio broadcasts in stereo
- Music player for listening to Chaku-Uta<sup>®</sup> and music tracks saved to memory cards
- "Simple Mode 3" for easy-to-use operations and "Limit Mode" to prevent overuse

For more information on the V604T, please see the attached appendix.

\*1: Analogue TV and FM radio broadcast signals may be subject to noise or not received depending on usage environment.

\*2: The V604T can play back music files in AAC format.

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- The V604T operates on Vodafone K.K.'s PDC network and is for use only in Japan.
- Chaku-Uta<sup>®</sup> is a registered trademark of Sony Music Entertainment Inc.
- Windows is an abbreviation for the Microsoft Windows operating system.
- Microsoft and Windows are registered trademarks of Microsoft Corporation in the U.S. and other countries.
- miniSD is a trademark of the SD Card Association.
- Mobile Rupo<sup>™</sup> is a trademark of Toshiba Corporation.
- QR Code is a registered trademark of Denso Wave Incorporated.
- Powered by JBlend<sup>™</sup>, ©1997-2006 Aplix Corporation. All rights reserved.
- Java and Java-based trademarks and logos are trademarks or registered trademarks of Sun Microsystems, Inc. in the U.S. and other countries.
- JBlend and all JBlend-based trademarks and logos are trademarks or registered trademarks of Aplix Corporation in Japan and other countries.
- The Vodafone V604T is powered by JBlend<sup>™</sup>, developed by Aplix Corporation, to speed up the execution of Java<sup>™</sup> applications.
- V-appli is a trademark of Vodafone K.K.
- Vodafone, Vodafone live! and the speech mark symbol are registered trademarks or trademarks of Vodafone Group Plc.

### **About Vodafone K.K.**

Vodafone K.K. is a leading mobile operator in Japan with over 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 140 countries and regions on 192 networks. For more information, please visit [www.vodafone.jp](http://www.vodafone.jp) \*Above data is current as of 28 February 2006.

## V604T by Toshiba

### 1. Main features

- “TV View Style” and “TV Rod Antenna” for comfortable analogue TV viewing

The V604T's integrated terrestrial analogue TV tuner allows customers to check TV programs easily on the go. The handset's "TV View Style" design enables customers to automatically activate the TV tuner for viewing in horizontal full-screen format by rotating the main display back 360 degrees while holding down a central side button. To get the best possible TV picture\*<sup>1</sup>, a "TV Rod Antenna" can be positioned to any angle. Whenever a new message is received in TV mode, mail text is displayed in the lower part of the display as captions\*<sup>2</sup> so customers do not have to worry about missing important messages.

\*1: Analogue TV signals may be subject to noise or not received depending on environment.

\*2: Captions display only one time after a new mail is received. Initial settings are set to background (no caption display) so a change in settings is required to display captions.

- Dedicated FM radio tuner for enjoying FM radio broadcasts in stereo

The V604T comes with a separate, dedicated FM radio tuner so customers can enjoy FM broadcasts in stereo. In addition to memory settings for FM stations in all of Japan's 47 prefectures, the V604T supports digital tuning so customers can tune channels to the nearest 0.1MHz. Customers can also listen to FM radio broadcasts in the background while browsing the web or messaging. \*FM radio signals may be subject to noise or not received depending on environment.

- Convenient features for not missing a program: TV recorder functions and Electronic Program Guide (EPG), TV/FM radio timer

The V604T can record parts of TV programs and capture stills for saving to memory\*<sup>1</sup>. When used with a 512MB memory card (sold separately), a total of approximately 160 minutes can be recorded. In addition, the V604T comes pre-installed with an Electronic Program Guide (EPG) application\*<sup>2</sup> so customers can easily find the programs they want to watch. The V604T also has a TV/FM radio timer\*<sup>3</sup> so customers can activate TV and FM radio programs at a given day, time, and channel, so they do not miss a show they want to watch or listen to.

\*1: Recorded/captured programs and stills cannot be copied, edited or sent by mail. Recorded/captured programs and stills cannot be played back on other handsets. They also cannot be set as wallpaper or ring tones.

\*2: Communication charges apply when using EPG.

\*3: An alarm notifies of the set time when battery indicator falls to one bar or less, when some functions are in operation, or when Limit Mode is in effect. The timer cannot be set for simultaneous TV and FM radio broadcasts.

- Music player for listening to Chaku-Uta<sup>®</sup> and music tracks saved to memory cards

V604T customers can play Chaku-Uta<sup>®</sup> music tracks downloaded from Vodafone live! or PC music files\* transferred to memory cards (sold separately). Even when the handset is closed, the V604T can continue to play music uninterrupted. The V604T also comes with full-fledged features for music enjoyment, including a stereo earphone mic with TV antenna for realistic sound and stereo twin speakers which feature high-quality acoustics.

\*The V604T can play back music files in AAC format.

\*Beat Engine for V604T (separate download required) music transfer software is convenient for transferring music data on PCs to memory cards. Beat Engine for V604T is compatible with Windows 2000 or Windows XP SP1 or later operating systems. When using other operating systems, customers are required to create a dedicated folder on the memory card for directly copying music data. Music file names must also be renamed.

- “Simple Mode 3” for easy-to-use operations and “Limit Mode” to prevent overuse

The V604T is equipped with “Simple Mode 3” for easy operations, which displays frequently used functions such as voice calling, mail and camera functions in large fonts. Menu displays are four times (40 horizontal x 52 vertical pixels) the size of normal mode, making the handset easy-to-use for beginners and mature users. “Limit Mode” lets customers set up individual “usage rules”, which allows them to control outgoing and incoming voice call numbers, when calls are made, usage volume (total outgoing call times), and TV/FM viewing, making the handset suitable for children.

## 2. Main Specifications

|  |                 |   |
|--|-----------------|---|
| Size (Width x Height x Thickness)                                |                 | Approx. 50 x 103 x 25mm (when folded, excluding indicator lamp)   |
| Weight   |                 | Approx. 145g  |
| Continuous talktime / standby time                               |                 | Approx. 120 min. / approx. 380 hrs. (when folded)   |
| Continuous analogue TV viewing time                              |                 | Max. approx. 30 minutes or max. approx. 60 minutes* <sup>1</sup> (after full charge)  |
| Continuous FM radio listening time                               |                 | Max. approx. 1 hour or max. approx. 3 hours* <sup>1</sup> (after full charge)   |
| Display  | Main            | 2.4-inch (240 x 320 pixels)<br>Super Fine PolySilicon TFT LCD (max. 260,000 colours)  |
|  | Sub             | 1.1-inch (112 x 112 pixels) TFCC LCD (65,536 colours)   |
| Mobile camera  | Pixels/type     | 1.31 million effective pixels/CMOS  |
|  | Zoom            | Max. 8x digital zoom (still photo) / 10x digital zoom (video)   |
|  | Max. photo size | 960 x 1,280 pixels  |
| Max. character display<br>(full size, display of received mails) |                 | 25 chars. (5 chars. x 5 lines) / 72 chars (8 chars x 9 lines) / 110 chars.<br>(11 chars. x 10 lines: standard size) / 306 chars. (18 chars. x 17 lines)   |
| Max. mail capacity (received/sent)                               |                 | 2,000/300* <sup>2</sup>   |
| Max. photo capacity (no. of photos)                              |                 | 10MB, shared (max. approx. 1,000* <sup>2</sup> )  |
| External memory  |                 | miniSD™ memory card (sold separately)   |
| Polyphonic ring tone voices                                      |                 | 64  |
| Other main functions   |                 | V-appli (256K Appli Ver. 2), Multi-window mail viewing, Mobile Rupo™ predictive text entry, Spam mail sorting, Electronic dictionary, Weather indicator, IrDA, Bilingual menus, QR code reading, Ku-man 3D character screen saver |
| Colour variations  |                 | Mint White (pictured), Earthy Brown, Bergamot Purple  |

\*1: Possible to choose Auto Off function when continuously viewing terrestrial analogue TV broadcasts or listening to FM radio.

\*2: Saving capacity depends on file sizes

## 2. Retail Price (standard set): open price

Standard set: mobile handset, battery pack, rapid charger, stereo earphone mic with TV antenna.

## 3. Availability

Planned for late April 2006

# V604T

Mint White

(Manufactured by Toshiba)

