

Vodafone K.K. to introduce Face Recognition security feature

Vodafone K.K. today announces the introduction of a Face Recognition function that authenticates customers by sensing their facial features to increase mobile phone security. The new function will be included in the Vodafone 904SH, a new 3G handset by Sharp scheduled to go on sale in late April 2006.

The Face Recognition function employs software based on Oki Electric Industry Co. Ltd.'s "FSE (Face Sensing Engine)", embedded facial image processing middleware, and utilises the sub-camera located close to the main display to recognise customers by sensing the position of their eyes, eyebrows, mouth and other facial features. By pre-registering a customer's^{*1} face and a secret question and answer, the camera will automatically activate when the handset is opened and authenticate a customer in less than a second.

When the Face Recognition function is enabled the keypad will be locked until the handset is opened and the pre-registered customer's facial features matched^{*2}. Also, if facial features cannot be properly sensed due to dark or backlight conditions, the face and secret question^{*3} of the person who opens the handset will be displayed and the handset can be unlocked by entering the appropriate answer.

The Face Recognition function helps ensure the security of their handsets by preventing misuse by third parties, and can also protect private information such as registered numbers, mail addresses and mails in the event that their handset is lost or stolen.

Following the Vodafone 904SH, Vodafone K.K. plans to introduce the Face Recognition function to future 3G handsets.

For more information on the Face Recognition function, please see the attached appendix.

*1: As families sometimes share one handset or multiple customers use one handset under a corporate contract, customers can register the faces, secret questions and answers of up to 5 people (in the case of the Vodafone 904SH). The number of customers that can be registered may differ depending on the handset model.

*2: Customers can receive calls and make emergency calls (110, 119, 118) when the handset is locked.

*3: The function will estimate a registered customer by sensing the facial features of the person who opens the handset and display the appropriate secret question. If multiple customers are registered, the question of the customer whose facial features most resemble those of the person who opens the handset will be displayed.

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- Vodafone and the speech mark symbol are registered 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 137 countries and regions on 188 networks. For more information, please visit www.vodafone.jp *Above data is current as of 31 January 2006.

Vodafone Face Recognition function

1. Overview

The Face Recognition function employs software based on Oki Electric's "FSE (Face Sensing Engine)", embedded facial image processing middleware, and utilises the sub-camera located close to the main display to recognise customers by sensing the position of their eyes, eyebrows, mouth and other facial features. By pre-registering a customer's^{*1} face and a secret question and answer, the camera will automatically activate when the handset is opened and authenticate a customer in less than a second.

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In addition, the function also features a Mask Mode, which enables the sensing of facial features even if customers are wearing masks.

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2. Face sensing image



The above image shows the detection of facial features. This will not appear on the actual screen.

3. Compatible handsets

Vodafone 904SH by Sharp (scheduled to be released in late April 2006)

* More compatible handsets are planned for the future