

## The Communication Tool Born by Dog Bark Analysis – An Insight Into a Dog's Life?

### Announcing "Bowlingual"

Having received a huge response from people in Japan and abroad following our August, 2001 announcement, Takara Co., Ltd. is pleased to announce the nationwide release of "Bowlingual", (14,800 yen plus tax), a product which comes a step closer to realizing everyone's childhood dream of conversing with their pet.

"Bowlingual" was developed with the cooperation of Index Corp. (headquarters: Setagaya-ku, Tokyo; CEO: Masami Ochiai), a mobile contents developer with whom Takara carried out a capital tie-up in 2000, and the Japan Acoustic Laboratory (headquarters: Shibuya-ku, Tokyo; President: Matsumi Suzuki), which offers expert advice and consulting services and carries out research and development in the field of sound, acoustics, and radio.

This product is the first to use the Japan Acoustic Laboratory's "Animal Emotion Analysis System," which was developed using an enormous database of voiceprints and uses sophisticated voice analysis technology. Takara is responsible for planning and marketing of the product, and Dreams Come True, Co., Ltd. (a Takara Group company) is in charge of product development.

"Bowlingual" is a portable tool that allows dogs and their owners to communicate more easily. Its main function is to transmit a dog's bark from a small wireless microphone attached to the dog's collar to the main device, (in a process known as Sound Forwarding), where the sound is analyzed. The results of this "voice translation" are then displayed on the screen.

Analysis is based on advice from an expert in animal behavior, Dr. Norio Kogure (Ph.D. in veterinary medicine; director of the Kogure Animal Hospital). Drawing on studies of canine behavior, the "Bowlingual" divides sounds into six categories of emotion, (happy, sad, frustrated, angry, assertion, desire), allowing dog-owners to understand their dog's feelings when his bark would have left them confused. The "Bowlingual" can even be set to record the dog's emotions when their owner is away, letting them know how he was doing while they were out. These features let the owner become closer to their pet and encourage them to take an interest in his feelings. "Bowlingual" also has a data analysis function that compiles information on the dog's bark over a set period, so the owner can enjoy making a 'doggy diary' and improve communication with their canine at the same time.

## **Main Voiceprint Analysis Functions**

### **Voice Translation Function (emotion patterns: Approx. 200 types)**

- Analyzes the dog's voice, transmitted by radio from the microphone to the main device, in real time. The dog's utterances are transformed from sound into words and illustrations on the LCD screen.

### **Data Analysis Mode (displays analysis based on the results of the Voice Translation Function)**

- **Today's Mood:** Carries out an analysis of the day's results and displays the dog's mood.
- **Friendliness gauge:** Summarizes results to give a general picture of the dog's feelings towards its master.
- **Graph Display:** Displays the results of the day's emotional analysis in the form of a graph.

## **Other features**

### **Gesture translation mode (Interprets 23 types of emotion and displays them as text)**

- Analyze the emotion in the dog's gestures and find out what he's thinking.

### **Training mode**

- Tips on training and teaching tricks, listed by level, to improve owner-pet communication.

### **Health check mode**

- Offers health advice in chart form and includes answers to questions about symptoms.

### **Schedule mode**

- Enter information about the dog's regular checkups, vaccinations and so on and the "Bowlingual" will display the date on the top menu and provide a reminder on the appointed day.

### **Timer mode**

- Training a dog is best done within a set time period. With Timer mode, the owner can make the most of their training time.

### **Options**

- In the initial settings there are options to enter the date and time, name, breed, gender, and birth date of the dog, so voice analysis can be tailored to the dog's breed and other characteristics.

Takara will unveil "Bowlingual" as part of its new, pioneering approach to the field known as 'life entertainment' – and its first step into the estimated ten trillions yen market for pet products.

Animals have become irreplaceable companions, offering unconditional kindness and a release from

the stress of daily life, just like a member of the family. Takara hopes that by lending an ear to the barks and meows of their furry friends, families will be able to communicate better with their pets, and we will continue to develop unique products that offer relaxing diversions for children and adults alike.

## **Product Information**

<b>Product name:</b>	<b>“Bowlingual”</b>
<b>Price:</b>	<b>14,800 yen (plus tax)</b>
<b>Product description:</b>	<b>Main device: W78.8 x H94.5 x D34.7 (mm) Wireless microphone: W83 x H38 x D23.9 (mm)</b>
<b>Release date:</b>	<b>End of August, 2002</b>
<b>Weight:</b>	<b>Main device: Approx. 160g Wireless mike: 70g</b>
<b>Batteries:</b>	<b>Main device: Two (2) AA alkaline batteries</b>
<b>LCD screen:</b>	<b>(100 x 64) dot matrix monochrome liquid crystal display</b>
<b>Memory:</b>	<b>16 Mbit</b>
<b>Transmission distance:</b>	<b>Approx. 7m (with no obstacles)</b>
<b>Continuous use:</b>	<b>Approx. one month (when used for three hours per day)</b>
<b>On sale at:</b>	<b>Pet stores, pet counters, variety stores, toy stores</b>
<b>Sales target:</b>	<b>500,000 units</b>

**“Bowlingual” is currently under development. It has not yet been determined whether this product will be sold abroad. Please see future press releases for information.**