DA113 User Manual

Product Overview

Figure 1 below illustrates the interactions of the DA113 device with the outside world as well as with other components of the DA113 system overall. This device collects encoded audio watermarked with Arbitron's patented Critical Band Encoding Technology and using cellular technology forwards this information back to Arbitron servers. The DA113 also determines if the person is in home or out of the home using an In-Home Transmitter. The DA113 also uses a Headphone adapter to when the panelist is wearing headphones to collect this data from MP3 or other devices that use headphones.

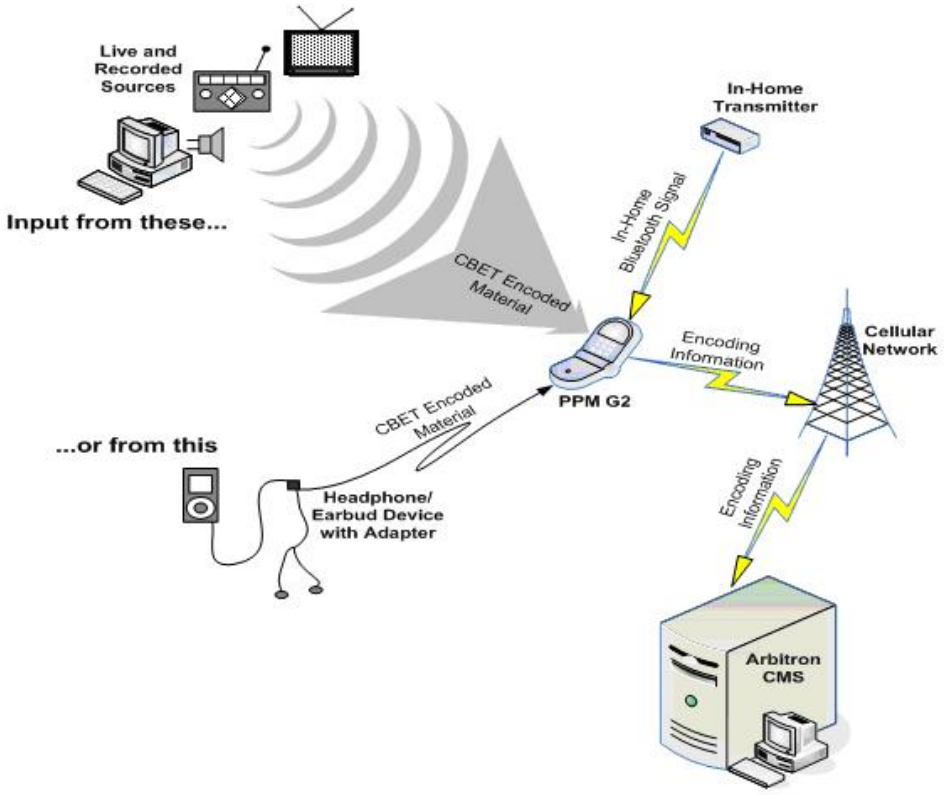

Figure 1: Interaction of DA113 System

DA113 Main Functions as below:

1. Audio data Acquisition Functions: data collection through the DSP, and then transmitted to specified Server through the phone's GPRS
2. GPRS Function: Use only on a mobile phone SIM card, GPRS function, will collect the data sent to the specified server. No SIM card of various number of services, such as ADN, SDN, FDN.
3. Bluetooth function : The Bluetooth device only a search feature, only can search to the Device ID and Bluetooth address. No Bluetooth connectivity, no data transmission and other functions also do not support. In addition, DA113 Bluetooth can not be searched.

DA114 Main Functions as below:

DA114 is an accessory of DA113, the HW part are made of DC power supply and Bluetooth chip.

Working Processes: power-on reset directly by DC power supply, and then the Bluetooth module

go into sending a specific Device ID and Bluetooth address automatically, the work cycle is 60 minutes. Once finish one cycle then go into next same cycle, and uninterruptible power equipment will be permanently loop cases. DA114 will not allow any Bluetooth device to match, so it will not be any data transmission, only as a specific identifiable through the Bluetooth wireless device.

User guide

DA113 was designed for those companies which working for collecting audience rating, Broadcasting rating, music rating, etc. Radio station and TV station need encoded Arbitron's CBET into their Radio and TV audio. There is a high sensitive microphone in DA113, so DA113 can receive outside audio and decoded CBET to analysis which Radio, TV or music it is. Also DA113 will search DA114 through Bluetooth every 5min to determine whether DA113 is working at home or not. And DA113 have an acceleration sensor to determine whether DA113 is in moving status or not. After decode audio finished, DA113 will save current information along with current in-home status and moving status. DA113 will report its discovery result to internet Server every day through GPRS.

Usually, those companies need do as following:

1. With Arbitron's assistance, Cooperate with Radio station, TV station, etc, to embed CBET in the show;
2. With Arbitron's assistance, set one internet server and configure DA113 to enable it can upload data to that server;
3. Hire enough people and give everyone one set of DA113. Let them carry DA113 and collect their hobby on Radio, TV, etc;
4. Finally, they can get report from server about audience rating and Broadcasting Rating;

For the employee, they need do follow that:

1. Put DA114 to you home power supply, so that DA114 can work constantly. DA114 will be waiting for Bluetooth search always;
2. Charge DA113 to ensure it have full battery at first time. DA113 will power on and work once it gets power supply. And DA113 only can be shutdown automatically when battery capacity is very weak;
3. Carry DA113 always so that it can receive what your are listening;
4. When you are listening from stereo device through headphone, please connect your headphone and personal stereo device to headphone adaptor. So that DA113 can receive the audio;
5. Every night please charge DA113, to ensure it has enough power;

FCC Warning Statement

Any Changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

This device complies with part 15 of the FCC Rules. Operation is subject to the following two conditions:

(1) This device may not cause harmful interference, and
(2) This device must accept any interference received, including interference that may cause undesired operation.

FCC Radiation Exposure Statement:

This device was tested for typical body-worn operations with the belt clip provided by the manufacturer and complies with FCC radiation exposure limit set forth an uncontrolled environment. The use of accessories that do not satisfy these requirements may not comply with FCC RF exposure requirements, and should be avoided.

Note:
This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

—Reorient or relocate the receiving antenna.

—Increase the separation between the equipment and receiver.

—Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.

—Consult the dealer or an experienced radio/TV technician for help.