

FCC RF EXPOSURE EXHIBIT

Plantronics Model: WH500 DECT UPCS Wireless Headset FCC ID: AL8-WH500

Device Mode of Operation

The system (base and headset together) can be unlinked, linked but with no voice path open (idle locked state) or linked with voice paths open. Unlinked is when the ends of the system are out of range. Linked but no voice path open is when the system is ready for use but no voice path is active (idle locked), and linked with voice paths open is when the system is in use for voice communication. Audio can be provided from the telephone and/or the USB interface.

Transmission Mode

The headset unit is mated with the base unit (subscribed to each other) under normal operation. The communications link is custom (double-slot) TDMA (UPCS standard), and is symmetrical; both ends of the link transmit using the same protocol.

Maximum Duty Cycle

Maximum Duty Cycle occurs when the headset and base are in a wideband audio link. Maximum duty cycle (wideband audio mode) is approximately 8.3%. For each end of the active link in wideband audio mode, a unit transmits for 2 out of 24 timeslots → 2:24 duty cycle. The DECT frame rate is 10ms, so each end of the link transmits for approximately 800 uS every 10ms when the system is linked and active. In narrowband audio mode, the duty cycle is exactly half that in wideband audio mode, so approximately 4.1%. When the system is linked but voice paths are not open (headset is "idle-locked" to the base) the base transmits with a 1.3% duty cycle (130uS every 10mS). In this mode the headset will transmit link maintenance information every thirty seconds. When unlinked and out of range (the headset cannot hear the base), the headset does not transmit, and the base transmits at a 1.3% duty cycle (130uS every 10mS). Two time slots are used for wideband audio, effectively doubling the duty cycle, minus idle time.

Maximum RF Output Power

Manufacturer's Rated Maximum Peak Conducted Power = 19.7 dBm (93.3 mW)
 Manufacturer's Specified Source-Based Time-Averaged Duty Cycle = 8.3%
 Max. Source-Based Time-Averaged Output Power = 8.9 dBm (7.8 mW)

Device Operating Configuration(s) and Exposure Conditions

The Plantronics WH500 Headset can be worn on either the left or right ear and is worn over-the-ear. The Plantronics WH500 Headset is intended for use within the General Population / Uncontrolled RF exposure environment. See photographs (next page) of device and antenna placement.

Antenna-to-Ear Separation Distance

15 mm (manufacturer measurement)

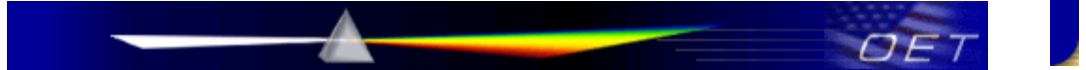
Analysis Summary

Based on the transmission modes, operating configurations and maximum source-based time-averaged output power and duty cycle as described in this document, SAR compliance is demonstrated for the Plantronics WH500 DECT UPCS Headset without routine SAR measurements (in accordance with the FCC's response to KDB Inquiry Tracking Number 309465).

From: oetech@fccsun27w.fcc.gov
Sent: Friday, June 18, 2010 1:07 PM
To: jon.hughes@celltechlabs.com
Subject: Response to Inquiry to FCC (Tracking Number 309465)



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Inquiry:

---Reply from Customer on 06/16/2010---

In anticipation of the Commission's acceptance of proposed RF Exposure exhibit (per previously accepted procedures), we are hereby submitting the RF Exposure exhibit for FCC review and speed up the process.

Response:

1. Please include the following grant condition:

" device is a wireless headset worn on the ear and operates with a maximum duty factor of 8.3% using a maximum of 2 out of 24 Time slots.

2. Please correct or clarify the two different source-based averaged based Max tx power 7.75bBm or 8.9dBm.

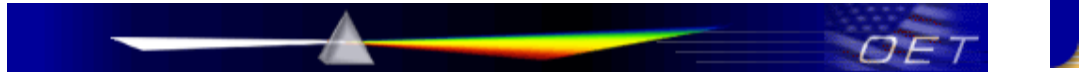
3. The included RF exposure report language should not use KDB response but analysis response.

Do not reply to this message. Please select the [Reply to an Inquiry Response](#) link from the OET Inquiry System to add any additional information pertaining to this inquiry.

From: oetech@fccsun27w.fcc.gov
Sent: Monday, June 21, 2010 6:12 AM
To: jon.hughes@celltechlabs.com
Subject: Response to Inquiry to FCC (Tracking Number 309465)



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Office of Engineering and Technology

Inquiry:

---Reply from Customer on 06/18/2010---

1. Noted
2. Correct maximum conducted source-based time-averaged output power is 8.9 dBm. Revised KDB inquiry document ("FCC KDB Inquiry 052710 - CONFIDENTIAL - Rev1.1") was resubmitted on June 01, 2010 reflecting the corrected output power level to 8.9 dBm from the original document listing incorrect 7.75 dBm.
3. Noted. Please see attached revised RF Exposure Exhibit.

Response:

The KDB is now closed with the inclusion of the grant condition. please contact FCC for any other question(S)

Do not reply to this message. Please select the [Reply to an Inquiry Response](#) link from the OET Inquiry System to add any additional information pertaining to this inquiry.