Multitone Electronics plc
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Website: www.multitone.com

Federal Communications Commission,
7435 Oakland Mills Road,
Columbia, MD
21046
USA

6th September 2007

Certification Of Product to FCC R & R's, Part 15 Subpart C
Multitone EkoTek Series Repeater - E862WREP

Dear Sirs,

We wish to make application for the Certification of the above referenced equipment as part of our EkoTek Series of products, under the auspices of R & R Part 15, Subpart C, Section 15.247. Further separate Form 731's have been completed and supporting exhibits attached, for each individual equipment that further form this Series. The main system data may be found with the application for the **2WHUB** device from this Series.

The device that is the subject of this application is the: -

Repeater (Node)/Call-point repeater (2WREP) - Scattered throughout a facility (up to 300), repeaters (Nodes) form the backbone of the radio mesh network, by automatically forming links with other units in the chain and allowing messages to pass to and from the portable devices and the HUB. The links between each of the Nodes is continuously tested, so should a route fail, then the Node will automatically seek an alternative route to another. A Call-point repeater has the same function as a standard repeater, with the addition of a local alarm/assistance button.

SDR - This equipment may be classed as a Software-Defined Radio. It may be further broadly classified as a Master device in that like the HUB, it continuously transmits a Main Beacon every second, which provides system information such as time/date, quality of link to HUB, any messages (both outgoing and acknowledgement of incoming) and frequency-hopping information. Additionally, it also transmits a second location beacon signal every second, at a lower RF power (-14dB relative to Main Beacon nominal).

It is intended that the control of the software that is used to define the radio parameters for this product, be retained within Multitone. Each unit will be pre-programmed before dispatch and the only radio parameter which may be changed during installation, is the default RF channel within the band. (see System Installation & Configuration Manual with HUB submission).

Software Control - The software which controls the RF parameters for all the EkoTek products is Multitone proprietary and is controlled by the company development group and company QA procedure P020/02, which forms part of our ISO 9001certification.

As stated above, each equipment is pre-programmed before dispatch and at this time no other external access is to be allowed to the RF parameter software, apart from setting the default RF channel during network installation. The only accessible software control is for network parameter setting.

Servicing - It is not intended that the EkoTek Repeater products be field serviceable. They will be either returned to Multitone or our agents for repair and/or replaced with another unit.

RF Exposure - The nominal RF ERP of the device, is 10mW. This falls below the lower threshold category for General Population exposure (for *f* 2.4GHz, 25mW) for *d* <2.5cm. The product is intended to be carried by personnel, either belt-mounted, or in a suitable pocket.

Confidentiality - We wish to request Permanent Confidentiality for parts of this item under the terms of R & R 0.457 and as denoted on the Form 731, please see separate request letter.

Documentation - Attached is product specific documentation, to be read in conjunction with the generic data sheets and overall system documents attached to the HUB application. I hope that the information supplied enables you to make an initial assessment of the equipment.

Once you have formed further questions re this submission, please do not hesitate to contact me. E-mail is probably the most efficient route.

Yours sincerely,

B.R.Merchant
Principal Approvals Engineer
Multitone Electronics plc

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Request For Confidentiality
Multitone EkoTek Series FOB - E862WREP

Dear Sirs,

In accordance with Rule Parts 0.457 & 0.459, we hereby request that the following exhibits entered as part of the certification process for the above product, be held as Permanently Confidential.

Schematics:-

2961-8164-2; 0261-8165-2; 3061-8166-2.
Block Schematic

The reason for this request is that these items are commercially sensitive and have not, or will not be made publicly available.

Yours sincerely,

B.R.Merchant
Principal Approvals Engineer
Multitone Electronics plc