

Dward ATCB

From: Greg Snyder [gregs@wll.com]
Sent: Thursday, April 28, 2005 12:17 PM
To: Dennis Ward (E-mail 2)
Subject: FW: End of Week Monitor/Survey of Application Progress

Hi Dennis,

Here's the comments.

Thanks,
 Greg

-----Original Message-----

From: dward ATCB [mailto:dward@americantcb.com]
Sent: Friday, April 01, 2005 3:59 PM
To: gregs@wll.com
Cc: marianneb@atcb.com
Subject: RE: End of Week Monitor/Survey of Application Progress

Hi Greg

I have taken over this application for Bill.

The grant process can proceed as soon as the following outstanding issues are addressed:

Item 1

Bills question about the antennae has not been adequately answered. The solution proposed is a simple note that says only the 28.5dBi antenna is approved. Section 5 of the manual states that, "if the installation antennas are not available, small, inexpensive dipole or patch antennas can be used for verification purposes." Since only the 28.5dBi parabolic has been tested, and since the manual says only that antenna type can be used, this would cause violation of 15.203 the FCC rules, which states "An intentional radiator *shall be designed to ensure that no antenna other than that furnished by the responsible party* shall be used with the device".

While 15.203 says this 'does not apply' to professional installation where certification is to be done using three sites as specified in 15.31d, it does say that "...*the installer shall be responsible for ensuring that the proper antenna is employed so that the limits in this part are not exceeded.*" In other words, even during professional installation, the use of approved antennae is still mandated in 15.203; you can't just run out to Radio Shack and get an "inexpensive dipole" or "Patch antenna" to set this thing up even if you are a professional installer. The reason and subsequent problem with the statement in the manual is that the 'setup antenna' may be left by the installer for use by the end user until the 'installation antenna' is provided. Thus, an 'inexpensive dipole' or 'patch antenna' cannot be used on this device (installation or otherwise) until and unless that type antenna has been tested. Then only the type tested or an antenna of those types with lesser gain can be used.

Consequently, the manual is confusing as to the types of antennae that can be used. Also, if installation was done in accordance with the manual this could possibly cause the device to violate the FCC rules. A more proper solution would be to remove references to all antennae that are not used with this device or provide radiated test data and MPE calculations along with any power considerations in the report. If the intent is to setup this device using a dipole or patch antenna, then those type antenna(s) need to have supporting data that the device is compliant under those conditions. Please adequately address this antenna issue.

Item 3

Page 5 rf interference statement and page 6 rf interference statement from the manual are conflicting. Since the manual uses both a 15.105(a) Class A (page 5) and a 15.105(b) Class B (page 6) rf interference statement the indication is the device could be used in either a commercial or a residential environment. What is to prevent this system from being setup and used by a home office? If this can be done, then the digital device portion would have to be Class B and not Class A. Please explain how and why this device would never be used or sold to a residential environment. This would mean the Class B statement indicating residential compliance levels need to be removed and only commercial environment mentioned.

Item 10

Professional Network Developers are not limited to commercial buildings. Some work out of their homes. Because of the reference to residential compliance in item 3 above, how does professional installation negate the use in a residential environment? Perhaps the manual should be more clear and state "For use in commercial environments only".

Item 11

The request for confidentiality does not have the Block diagram listed. While the Block Diagram does exist in the theory of operation, it has also been provided as a separate exhibit. So, while the theory of op may be confidential, the Block diagram exhibit will not be unless they modify the request for confidentiality to include it.

As soon as these issues are addressed I can issue the grant.

Thanks

Dennis Ward

> *Evaluation Engineer*

> *AmericanTCB*

> *Certification Resource for the Wireless Industry www.atcb.com*

> *(703) 847-4700*

> *Direct: (703) 880 4841*
