

Reply-To: <wade.kerzie@immediatemarketing.com>
Organization: IMI
To: "'Dennis Ward'" <dennis@yosemite.net>

Dennis, here is the response e-mail tot the question about multiple antennas. Unfortunately, his mail program did not attach my original message. I will send that in another message.

Reagrds,

Wade F. Kerzie
Phone 214-668-7986
wade.kerzie@immediatemarketing.com

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

From: Raymond Laforge [mailto:RLAFORGE@fcc.gov]
Sent: Wednesday, May 15, 2002 2:42 PM
To: wadekerzie@msn.com
Subject: Re: Part 15 Clarification

I don't have a problem with using both antennas as long as the total field strength does not exceed our limits. Note that a leaky coax used for FM won't work for AM and visa versa.

Name: TEXT.htm
TEXT.htm Type: Plain Text (text/plain)
Encoding: quoted-printable

Subject: FW: Part 15 Clarification
Date: Mon, 21 Oct 2002 18:44:48 -0500
From: "Wade Kerzie" <wadekerzie@msn.com>
Reply-To: <wade.kerzie@immediatemarketing.com>
Organization: IMI
To: "'Dennis Ward'" <dennis@yosemite.net>

Here is the original message. It is specifically the fifth bullet item that prompted his response. Please read it carefully, as it quotes some of the verbiage in the spec that lead us down the path of multiple antennas.

Thanks again,

Wade F. Kerzie
Phone 214-668-7986
wade.kerzie@immediatemarketing.com

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

From: Pinnell, Hunter [mailto:hpinnell@chipdata.com]
Sent: Thursday, May 30, 2002 8:46 AM
To: wadekerzie@msn.com
Subject: FW: Part 15 Clarification

Here ya go.
Hunter Pinnell

hunter.pinnell@chipdata.com
2220 Campbell Creek

Suite 100
Richardson, TX 75082

mobile: 469-766-2667
office: 214-615-8338
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[Image]

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

From: WADE KERZIE [mailto:wadekerzie@msn.com]
Sent: Wednesday, May 15, 2002 2:07 PM
To: rlaforge@fcc.gov
Cc: Pinnell, Hunter; Edwards, Matt
Subject: Part 15 Clarification

Ray, thanks for the call back today. Please respond and let me know that this message found its way to you.

As we discussed, I am interested in getting some clarification on Part 15, specific to unlicensed intentional radiators on the AM and FM bands. Before I detail my questions, let me first say that I have read the Part 15 document and understand most of it. I am mainly looking to verify some of my interpretations of the rules.

My company's intent is to engineer, build, and sell "part-approved" transmitters - specifically to the fast food industry for broadcasting to cars in the drive thru lane. We have purchased and tested several other part-approved transmitters and have determined the following:

- * Due to all sorts of RF inference emitting from inside the restaurant building, the transmitter needs to be located outside - no problem with that.
- * The unit ideally should have both AM and FM broadcast capabilities - user selectable (assuming only one band functions at any given time). The reason is that some environments may require the additional range that AM seems to produce. Is there any reason why the two functions (AM and FM) cannot be engineered onto the same board - again, assuming only one operates at any given time and that neither exceed the 250 Micro volts at 3 meters limitation.
- * In some cases, a rigid antenna (mounted/fixed to the transmitter) will suffice for the coverage area intended.
- * However, some environments would be more conducive to longer, more pliable antenna that could be fixed to the ground (or buried) along the curb or fixed to the building itself. Section 15.31, paragraph (d) makes mention of systems using "leaky" coaxial cable. If we choose to go that route, how is the certification testing done? That same paragraph implies that testing will be done at a minimum of three installation sites that are representative of typical installs. How is this accomplished? Are we permitted to install our units prior to certification? Who does the certification testing in that case?
- * If we were to employ "leaky" coax as a solution, can we also have the rigid antenna in operation? Section 15.31 paragraph (h) leads me to believe so, as it states, "If an intentional radiator incorporates more than one antenna or other radiating source and these radiating sources are designed to emit at the same time,..."
- * Our equipment will be professionally installed by an electrician. Thus, we are exempt from the "unique coupling" clause in Section 15.203. Am I understanding that correctly?
- * Secondly, as stated in that same section, it reads as though the

installing party (electrician) is "...responsible for ensuring that the proper antenna is employed so that the limit in this Part are not exceeded." Does this mean that our product can have a power adjustment (not easily accessible, or even know to the end user - as stipulated in Part 15) that that installer can tweak once the install is complete to bring emission up to the maximum allowed?

That is all for now. Thank you in advance for your efforts. I look forward to you response.

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