

To: "Timothy R. Johnson" <TRJ@adelphia.net>  
Subject: Re: Review of FCC ID: NHVWBJ443

Tim,

Could you confirm the following answer?

>The automatic deactivation in the report shows about 300 ms. Is this for  
>manual mode?

---->> Yes, this is manual mode.

>If so, please provide a plot that shows deactivation in < 50 msec as  
>specified below for transmissions in response to the 125 kHz signal.

---->> Please find attached file. This is data for transmissions in  
response to the 125 kHz signal.

RFEN is a output carrier, and the data is modulated with "FSK". In front of  
this data, there is about 2mS's signal. This signal is called  
"anti-collision" and is used for the confirmation which Hand Unit answered.  
<Since one control unit can register 4 hand unit max, data causes  
interference if they answer at the same time.>

The above answer is acceptable? I hope the grant is issued with this.

Thank you very much.

Best regards,

Yukie Koyama

.....

EMC Head Office Division  
A-Pex International Co.,Ltd.  
4383-326 Asama-cho Ise-shi  
Mie-ken 516-0021 JAPAN  
TEL +81-596-24-8116  
FAX +81-596-24-8124  
E-mail:ykoyama@a-pex.co.jp

.....

--Original Message 2003/02/06 7:20:50--

Yukie,

The automatic deactivation in the report shows about 300 ms. Is this for  
manual mode?

If so, please provide a plot that shows deactivation in < 50 msec as  
specified below for transmissions in response to the 125 kHz signal.

Thank You,

Tim

At 03:29 AM 2/5/2003, you wrote:

>Dear Tim,

>

>Thank you very much for your contact on the above application. I make a  
>reply as follow:

>

>1. Please see the file "Revised label".

>

>2. As you can see on the timing chart, "16 seconds" mean that the  
>transmission is stopped in 16 seconds maximum when Switch is kept pushing.  
>When the user release his hand, transmission is stopped within "0.5  
>seconds" after he released his hand.

>

>3. Please see the file "page 16 REVISED". Please replace the previous Page  
>16 with this.

>

>4. As for the explanation for the data sent by the 312 MHz Tx in response  
>to the 125kHz transmission, please see the file "RF response".

>

> >Is the data sent equivalent to the data sent during manual activation?  
>--->> Basically, it's equivalent. During the button is pushed, same data  
is

>continuously transmitted.

>

> >How long does the device transmit upon receiving the command?

>--->> About 50mS transmission. The longest data transmission is less than  
>50mS.

>

>5. Please see the last page of the file "RF response". To improve the  
>security, the counter comprising of 20 bits is incremental by one at each  
>LF transmission. This bit code indicates "Rolling code"

>

>The RF response format of transmission comprises preamble of 16 bits,  
sync

>of 2 bits, start bit of 1 bit, response code of 32 bits, fixed code of  
35

>bits and stop bit of 1 bit. Function code and disc code in the  
response

>code are not used in this application. The Rolling code" is a part of  
an

>encryption data consisting of 20 bits in the response code and  
increments

>the data by one from "00000" to "FFFFFF" every transmission or  
reception.

>When the data reaches "FFFFFF", it returns "00000" again. The addition  
of

>the rolling code not only improves the transmitted data with regard  
to  
>security performance but also constitutes a part of the  
transmitted  
>recognition code.  
>  
>1> The transmission of recognition code is not prohibited in the Section  
>15.231(a) due to above description with regard to the RF response format.  
>2> Since the transmission of recognition code automatically ceases within  
>0.5 second after being released the activation of the transmitter in case  
>of manual operation, the transmitter operation complies with 15.231(a)(1).  
>  
>3> Since the transmission activated automatically ceases transmission  
>within 0.5 second after activation, the transmitter operation complies  
with  
>15.231(a)(2).  
>  
>4> Since the transmitter does not periodically operate, the transmitter  
>operation complies with 15.231(a)(3).  
>  
>As a result, this transmitter complies with all the requirements in  
>15.231(a).  
>  
>6. Please see the file "SystemBlock" and "Schematic 2".  
>  
>7. Please see the file "Revised Form 731".  
>  
>Best regards,  
>  
>Yukie Koyama  
>.....  
>EMC Head Office Division  
>A-Pex International Co.,Ltd.  
>4383-326 Asama-cho Ise-shi  
>Mie-ken 516-0021 JAPAN  
>TEL +81-596-24-8116  
>FAX +81-596-24-8124  
>E-mail:ykoyama@a-pex.co.jp  
>.....  
>  
>--Original Message 2003/01/25 3:07:36--  
>Yoshiyuki/Yukie,  
>  
>Attached are comments regarding review of this application. Please  
>provide information as soon as possible.  
>  
>Thank You,  
>  
>Timothy R. Johnson, NARTE Certified EMC Engineer (No. EMC-002205-NE)  
>  
>Timothy R. Johnson, NARTE Certified EMC Engineer (No. EMC-002205-NE)

>Examining Engineer  
>American TCB, Inc.  
>6731 Whittier Ave.  
>McLean, VA 22101  
>  
>email: tjohnson@AmericanTCB.com  
>alternate email: TRJ@adelphia.net  
>direct number: 404-414-8071  
>corporate phone: 703-847-4700  
>corporate fax: 703-847-6888  
> - ATCB Comments\_012403.pdf  
(See attached file: Data.pdf)



[Data1.pdf](#)