

Subject: FW: FW: Qk7fh-me request for info
Date: Mon, 14 Oct 2002 11:02:53 -0500
From: "Doug Kramer" <dkramer@nceelabs.com>
To: <dennis@yosemite.net>

Dennis,
Does this help on the 2 FCC applications for QK7?

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

From: JSE [mailto:jseadapt@dtgnet.com]
Sent: Monday, October 14, 2002 11:40 AM
To: Doug Kramer
Subject: Re: FW: Qk7fh-me request for info

Doug,

Below are my responses to the questions from ATCB.

1 - When in "Direct Mode," the RF transmitter does not continuously transmit. When the switch is pressed, it transmits a single command to turn ON the A/C appliance. When the switch is released, another single command is sent that turns OFF the A/C appliance. This gives the effect of the user have some sort of continuous control of the A/C appliance. Of course, the appliance is not directly connected to the transmitting device. The appliance is plugged into a third-party reciever (already been through FCC approval) that actually supplies or removes power from the A/C appliance. This reciever accepts commands from the RF transmitter.

2 - The transmitter sends 32-bits of data each time it transmits a command. Each bit takes 1.1 miliseconds, for a total of 35.2 miliseconds. After sending a command, the transmitter goes into a software loop for about 1.5 seconds where no further transmissions are allowed. This also allows enough time for the command to be processed by the reciever(s).

*** This protocol used is standard X10 format. There are dozens of ***
*** FCC-approved X10-compatible designs, tens of millions of units.***

3 - Because of the X10 encoding protocol, there are always as many marks sent as nulls, and the duty cycle over any small portion of the transmission is 50%. This is independent of which of the 256 address codes is selected. I would not expect a given code to result in improved or diminished modulation as compared to any other code.

I hope this helps. Best Regards,

Jon Eckrich
Adaptivation, Inc.

Doug Kramer wrote:

> Holly,
>
> Could you see if someone there could address the first 2 comments on the
> attached document? I've copied Jon on this too.
>

> Thanks,
> Doug Kramer
> NCEE
> 4740 Discovery Drive
> Lincoln, NE 68521
> Tel: 402-472-5880
> Fax: 402-472-5881