Subject: RE: FW: FW: Qk7fh-me request for info
Date: Mon, 14 Oct 2002 12:19:15 -0500
From: "Doug Kramer" <dkramer@nceelabs.com>
To: <dward@americantcb.com>
CC: "Jonathan Eckrich" <jseadapt@dtgnet.com>

Dennis,
Yes the FSM-100 also operates in this manner, the exception being 4 switches instead of 1.

-----Original Message-----
From: Dennis Ward [mailto:dennis@yosemite.net]
Sent: Monday, October 14, 2002 12:02 PM
To: Doug Kramer
Subject: Re: FW: FW: Qk7fh-me request for info

Thanks Doug
Yes it helps. Also, please understand the while I understand that this Protocol is currently in many devices, each application MUST stand on its own merit. Consequently, questions like this need to be answered so if and when the FCC has questions about these devices they can get all the answers they need by reviewing the single application. Sorry to be so picky about this, but as I said, every application must stand on its own regardless of the technology. Does the FSM-100 also operate in in this manner? If so, a return email stating This would be sufficient to answer the same question about that device.
Thanks
Dennis

Doug Kramer wrote:

> 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 receiver (already been through FCC approval) that actually supplies or removes power from the A/C appliance. This receiver 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 milliseconds, for a total of 35.2 milliseconds. 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 receiver(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 is
> 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