



February 21, 2006

American TCB
6731 Whittier Ave
Suite C110
McLean, Va. 22101

Dear Examiner:

The Xirrus Model XS-3900 and XS-3700 product software will only allow the user to select channels and power levels that have been tested and approved for use in the respective country. Products shipped in the US are designed to only use channels 1 - 11 in the 2400 MHz band and the UNII channels are limited to channels 36 - 64 and channels 149 - 161. There is no way for the user to select a channel outside of this range.

The software also checks the channel separation in the 2400 MHz band and will not allow selection of channels with less than 20MHz channel separation. This insures that no two transmitters can be tuned to the same channel and that no two channels can be within 20MHz of each other. Only three channels can be used in the 2.4GHz band to ensure that channels do not overlap:

- Channel 1, channel 5 and channel 9 or 10 or 11;
- Channel 1, channel 6 and channel 10 or 11;
- Channel 1, channel 7 and channel 11;
- Channel 2, channel 6 and channel 10 or 11;
- Channel 2, channel 7 and channel 11;
- Channel 3, channel 7 and channel 11.

The maximum transmit power for each channel is hard coded into each radio. Even if the user requests a higher power, the radio firmware will limit the output power to the approved level.

Further, the firmware will adjust the output power for transceivers operating in the 5150 – 5250 MHz to ensure that the total power in the band remains below the 17dBm limit. The maximum output power for transceivers operating on channels 40, 44 and 48 is determined by the number of transceivers operating in the band as shown in the table below:

Output Power on each channel W				Aggregate Power	
36	40	44	48	mW	dBm

Number of TRx active in the band	1 TRx	0.009 (9.3dBm)	0.035 (15.4dBm)	0.04 (16.0dBm)	0.040 (16.0dBm)	0.040	16.0
	2 TRx	0.009 (9.3dBm)	0.020 (13.1dBm)	0.023 (13.6dBm)	0.023 (13.6dBm)	0.046	16.6
	3 Trx	0.009 (9.3dBm)	0.016 (12.0dBm)	0.014 (11.6dBm)	0.016 (12.0dBm)	0.046	16.6
	4 Trx	0.009 (9.3dBm)	0.010 (10.0dBm)	0.011 (10.6dBm)	0.011 (10.6dBm)	0.041	16.2

Note that the output power on channel 36 is limited to 9.3dBm to ensure compliance with the spurious emissions limits at the 150 MHz band edge.

Sincerely,



Patrick Parker
Chief Development Officer