

FEDERAL COMMUNICATIONS COMMISSION
EQUIPMENT APPROVAL SERVICES
PO BOX 358315
PITTSBURG
PA 15251-5315

ADEMCO
RADIO Eng.
160 Eileen Way
Syosset
NY 11791

23/December/99

Dear Sir,

SUBJECT: CLASS II PERMISSIVE CHANGE TO 5804BD.

The 5804BD is certified by the **FCC Grant of 12/23/96, file 31010/EQU 4-3-2, FCC IC CFS8DL5804BD.**

Modifications have been made to the data format of this product which effect the transmitter duty cycle and therefore the average power calculation. Exhibit 1 shows a calculation of the duty cycle of the new data format. Note the original duty cycle was 12.2% and the new duty cycle is 13.95%.

There are no changes to the frequency determining and stabilizing circuits, the modulation circuitry and the power output RF circuitry.

The radiated field strengths are recalculated and shown in exhibit 2 on the basis of the new duty cycle. Note that the reported power levels increase proportionally, although the transmitter still meets the minimum requirements of the applicable rules.

These changes constitute a Class II permissive change per FCC part 15, 2.1043 b 2)

The change is to only the PCB sub-assembly, the construction, final assembly, labeling and outward appearance of the device are unchanged.

Attached are the following exhibits:

EXHIBIT 1; DUTY CYCLE CALCULATION

EXHIBIT 2; RADIATED EMISSIONS MEASUREMENTS.

Please note that the following information is as per the original submission, and is not included;

ID label/location

Photographs

Block diagram and RF schematic

Test set-up

Users manual

Operational description

If you have any questions concerning this application, please contact the undersigned.

Kenneth L. Addy.
Director of Radio Eng.
Tel, 516 921 6704 ext 6640
Ken_addy@ademco.com

EXHIBIT 1 DUTY CYCLE CALCULATION
(**CFS8DL5804BD** Class II permissive change 12/16/99)

Calculation is on the basis of worst case data content in order to maximize duty cycle On-time.

Message packet is as follows:

2.3mS preamble at 50% duty cycle	=	1.15mS On-time.
1.0mS header at 0% duty cycle	=	0 mS On-time.
62 bits at data '0' i.e. 2/3 duty cycle	=	12.4 mS On-time.
4 bits at data '1' i.e. 1/3 duty cycle	=	0.4 mS On-time.
3.9mS guard at 0% duty cycle	=	0 mS On time.

Total On-time per packet = 13.95mS

The duty cycle of the message packets themselves is 25%, so there is only one message packet transmitted in any 100mS averaging period.

Therefore the duty cycle for the peak to average power conversion is 13.95%.

The message packets are repeated 10 times. The max transmission duration is 1 seconds.

EXHIBIT 2 RADIATED EMISSIONS
(CFS8DL5804BD CLASS II PERMISSIVE CHANGE 12/16/99)

FREQUENCY MHZ	PEAK READING uV/m	DUTY CYCLE 13.95%	AVERAGE READING uV/m
345	16218		2262
690	4898		683
1035	3126		436
1380	2951		412
1725	2754		384.