

# Maximum Permissible Exposure

FCC ID: AZPR7018SB-24G  
 Product Name: Radio Control  
 Model No: R7018SB

- According to FCC CFR 47 §1.1310, the criteria listed in the following table shall be used to evaluate the environmental impact of human exposure to radio frequency (RF) radiation as specified in 1.1307(b).

Table 1 Limits for Maximum Permissible Exposure

Frequency Range (MHz)	Electric Field Strength (V/m)	Magnetic Field Strength (A/m)	Power Density (mW/cm <sup>2</sup> )	Average Time (Minutes)
(A) Limits For Occupational / Control Exposures (f = frequency)				
30-300	61.4	0.163	1.0	6
300-1500	...	...	f/300	6
1500-100,000	...	...	5.0	6
(B) Limits For General Population / Uncontrolled Exposure (f = frequency)				
30-300	27.5	0.073	0.2	30
300-1500	...	...	f/1500	30
1500-100,000	...	...	1.0	30

## 2. MPE Calculation

LG Electronics Inc. declares that the product described above has been evaluated and found to comply with the RF exposure limits for humans, as specified based on ANSI/FCC recommendation.

Based on safety distance (r) **20cm**, the antenna gain (G) is **0.292 Numerical**, and the highest power output (P) is **14.699mW**, the power density (S) is **0.000854mW/cm<sup>2</sup>**.

RF Exposure Calculations:

$$S = (P * G) / (4 * \pi * r^2) \text{ or } r = \sqrt{(P * G) / (4 * \pi * S)}$$

Where :

Based on safety distance (r)=	20 cm
Highest Power Output (P)=	11.673 dBm = <b>14.699 mW</b>
Antenna Gain (G)=	-5.35 dBi = <b>0.292 Numerical</b>
MPE (S) = (P*G) / (4*π*r <sup>2</sup> ) =	= <b>(14.699*0.292)/(4*4*π*20<sup>2</sup>)= 0.000854 mW/cm<sup>2</sup></b>

Sincerely Yours,



Mr. Ben Cheng  
 Manager  
 AUDIX Technology Corporation