

Maximum Permissible Exposure (MPE) Evaluation

Applicant : JVC KENWOOD Corporation
Equipment : VHF DIGITAL TRANSCEIVER
Model No. : NX-5700H-F, VM5730H-F
FCC ID : K44499200

MPE Calculations FCC Part 1.1310

$$S = \frac{PG}{4\pi R^2}$$

$$R = \sqrt{\frac{PG}{4\pi S}}$$

Where:

S=Power density (in appropriate units, e.g. mW/cm²)

P=Power input to antenna (in appropriate units, e.g., mW)

G=Power gain of the antenna in the direction of interest relative to an isotropic radiator

R=Distance to the center of radiation of the antenna (appropriate units, e.g., cm)

Tx Frequency=	150 to 174	(MHz)	: FCC
Maximum peak power=	50.00	(dBm) (=100W)	
Antenna gain=	2.15	(dBi)	
S=	0.20	(mW/cm ²)	(Uncontrolled Environment)
P=	50000.00	(mW)	(=Maximum peak power x Dutycycle50%)
G=	1.64	(numeric)	
R=	180.66	(cm)	

This device is not subject to Routine Environmental Evaluation according to FCC Part 1.1307 because,

- Max output power for Part 74 is not more than 100 W ERP
- This device is not ship earth stations

Calculated minimum separation distance from antenna : 180.66 (cm)