

## Maximum Permissible Exposure (MPE) Evaluation

Applicant :	JVC KENWOOD Corporation
Equipment :	VHF DIGITAL TRANSCEIVER
Model No. :	NX-5600H-F3, VM5630H-F3
FCC ID :	K44499100

## **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/cm<sup>2</sup>) 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=	39 to 50	(MHz) : FCC
Maximum peak power=	50.49	(dBm) (=112W)
Antenna gain=	2.15	(dBi)
S=	0.20	(mW/cm <sup>2</sup> ) (Uncontrolled Environment)
P=	56000.00	(mW) (=Maximum peak power x Dutycycle50%)
G=	1.64	(numeric)
R=	191.19	(cm)

Calculated minimum separation distance from antenna :

191.19 (cm)