## **RF Exposure / MPE Calculation**

No.: 10521972HApplicant:Type of Equipment :Head Unit A-EntryModel No.:FCC ID:UJHNTG5HUE213

MITSUBISHI ELECTRIC CORPORATION SANDA WORKS declares that Model : NTG5HUE213 complies with FCC radiation exposure requirement specified in the FCC Rules 2.1091 (for mobile).

## **RF Exposure Calculations:**

The following information provides the minimum separation distance for the highest gain antenna provided with the "NTG5HUE213" as calculated from (B) Limits for General Population / Uncontrolled Exposure of TABLE 1- LIMITS FOR MAXIMUM PERMISSIBLE EXPOSURE (MPE) of §1.1310 Radiofrequency radiation exposure limits. This calculation is based on the highest EIRP possible from the system, considering maximum power and antenna gain, and considering a 1.0mW/cm^2 uncontrolled exposure limit. The Friis formula used was:

Where

- P = 3.00 mW (converted from Output power value in dBm in Theory of Operation: 4dBm and rounded off to the whole number)
- G = 1.71 Numerical Antenna gain; equal to 2.32 dBi
- r = 20.0 cm

 $S = (P * G) / (4 * \pi * r^2)$ 

For: NTG5HUE213

 $S = 0.00102 \text{ mW/cm}^2$