

8 Example of Noise Suppression for Car Navigators

Noise Suppression Content in Car Navigators

The car navigator is shielded with a metal case to prevent noise radiation from the body, as well as noise entering into the system. EMI filters are installed on all lines of each interface cable to suppress noise conduction through the cable.

The noise suppression effects obtained by a capacitor type EMI filter installed in the cable connector port varies depending on the GND condition. Therefore, it is

necessary to pay much attention to the GND condition. Improve the GND connection between the PCB and metal case, and design the circuitry to minimize the impedance at high frequencies between the metal case and the GND of the capacitor type EMI filter.

Noise radiated from the car navigator can be most effectively suppressed by also installing EMI filters on the clock line, bus lines, and power supply line.

