

1. EMC Performance

All types of electronic equipment may characteristically cause electromagnetic interference with other equipment, either through air or connecting cables. The term EMC (Electromagnetic Compatibility) indicates capability of the equipment, which curbs electromagnetic influence from other equipment and at the same time does not affect other equipment with similar electromagnetic radiation from itself. This product is designed to fully comply with the group 2 of EN60601-1-2 (IEC601-1-2), Class A, in EMC regulations. Proper installation following this service manual is required in order to achieve the full EMC performance of this product. The product must be installed as stipulated in [2. Installation Notice]. In case of issues related to EMC, please follow procedures stated in [3. Countermeasures of EMC troubles].

2. Notice upon Installation of the Product

- 1) Use either power supply cords provided by GEMS or ones designated by GEMS. Products equipped with power source plug should be plugged into the fixed power socket which has the protective grounding conductor.
Connect a three-pole plug to a three-pole socket without using a three-pole-to-two-pole convertor.
- 2) Connect the permanent grounding equipment to the protective earth terminal of the place where the protective grounding conductor of the equipment is set up.
- 3) Locate the equipment as far as possible from other electronic equipment.
- 4) Be sure to use either any cables provided by GEMS or ones designated by GEMS. Wire these cables following these installation procedures.
i.e. Wire power cables separately from signal cables.
- 5) Lay out the main equipment and other peripherals following these installation procedures.

3. General Notice

1) Use the optional peripheral equipment, as designated by GE Medical Systems, to satisfy EMC requirement.

Avoid using other equipment than designated by GE Medical Systems.

Failure to comply with this instruction may result in poor EMC performance of the product.

2) Notice against User Modification

Never modify this product. Unilateral user modification may cause degradation in EMC performance. Modification of the product includes ;

- a) Changes in cables (length, material, wiring etc.)
- b) Changes in system installation/layout
- c) Changes in system configuration/components
- d) Changes in means of fixing system/parts (cover open/close, cover screwing)

3) Operate the system with all covers closed. If you open any cover for some reason, be sure to shut it before starting/resuming operation.

Operating the system with any cover open may affect EMC performance.

4. Countermeasures against EMC-related Issues

Generally it is very difficult to grapple with issues related to EMC.

It may take much time and cost.

4-1. General countermeasures

Electromagnetic interference with other equipment

- 1) Electromagnetic interference may be alleviated by positioning other equipment far from the system.
- 2) Electromagnetic interference may be mitigated by changing the relative location (installation angle) between the system and other equipment.
- 3) Electromagnetic interference may be eased by changing wiring locations of power/signal cables of other equipment.
- 4) Electromagnetic influence may be reduced by altering the path of power supply for other equipment.

5. Notice on Service

1) Ensure all screws are tight after servicing. Loose screws may cause the degradation in EMC performance.

2) In case the RF gasket of this system is broken, replace it with a new one immediately.