# **Disinfection and Cleaning Instructions**

#### WARNING

- Confirm that the respiratory density of disinfectant including solvent is under legal regulation. Certain disinfectants may damage health. When using a disinfectant, follow instructions supplied by the manufacturers.
- Do not use the following disinfectants or sterilizers at the time of disinfection. Quality, performance and safety of each device cannot be assured.
  - Chloric disinfectant which is strongly corrosive to metals and rubber parts.
  - Disinfectant whose uses on metals, plastics, rubber parts and coating are forbidden according to the instructions supplied with the disinfectant.
  - Formalin gas and disinfectant sprays that may get inside the equipment. Disinfectant ethanol is recommended for disinfection. Carefully read the instructions and cautions supplied with the disinfectant before use. For details on the disinfectant, contact a FUJIFILM dealer or the service representatives at the agency from which you purchased the disinfectant.

## CAUTIONS

If the sensor unit of the flat panel sensor is not disinfected, it may lead to secondary infection. Clean the sensor unit of the flat panel sensor with ethanol for disinfection, etc. for each patient to prevent infection.

# Wireless Communication

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- Do not place devices generating electromagnetic wave (CT,MRI, diathermy,RFID etc.) near the DR-XD 1000 (FDR AQRO).
- We recommend not to use any other wireless devices such as cellular/smart phones, portable phones, microwave ovens, WAPs, etc. within 2m (6.6 ft) of the DR-XD 1000. When other wireless devices are used within 2m (6.6 ft), wireless data communication may be delayed. (Data will not be lost; if a timeout occurs a retry can be performed after the cause of interference has been removed)
- Do not cover the Flat Panel Sensor (DR-ID 1201SE/DR-ID 1202SE/DR-ID 1211SE/DR-ID 1212SE/DR-ID 1213SE/DR-ID1271SE/DR-ID1272SE/DR-ID1273SE/DR-ID1274SE/DR-ID1275SE) with a shield such as a metallic plate as this will interfere with a wireless communication.
  - For details, see "Flat Panel Sensors DR-ID 1201SE/DR-ID 1202SE/DR-ID 1211SE/DR-ID 1212SE/DR-ID 1213SE Operation Manual", "Flat Panel Sensors DR-ID1271SE/DR-ID1272SE/ DR-ID1273SE/DR-ID1274SE/DR-ID1275SE Operation Manual" and "Access point Operation Manual".

# Flat Panel Sensor

For details, see "Flat Panel Sensors DR-ID 1201SE/DR-ID 1202SE/DR-ID 1211SE/DR-ID 1212SE/DR-ID 1213SE Operation Manual" and "Flat Panel Sensors DR-ID1271SE/DR-ID1272SE/DR-ID1273SE/DR-ID1274SE/DR-ID1275SE Operation Manual".

# **Image Processing Unit**

• For details, see "DR-ID 300CL Operation Manual".

# FDR Go PLUS & FDR Visionary Suite

# **OEM Recommended Cleaning Instructions**

To avoid secondary infection

# Outline

This document is Shimadzu's voluntary cleaning instructions for the equipment proposed to minimize the risk of secondary infection. Every country must deal with regulations separately. Standards required for specific clinical use differs from place to place.

# **General Cleaning**

Before using disinfectant agents, it is necessary to clean the surface of the equipment in advance. Please remove the dirt on the surface using a cloth without lint, or a soft toothbrush that does not damage the surface. If dirt is difficult to remove, please dilute dishwasher detergent and soap with lukewarm water, and use them.

\*Please make sure that the dishwasher detergent and soap used for cleaning is completely wiped off before disinfectant treatment.

# Disinfectant Agents (Disinfecting)

The following agents can be used. But there are some restrictions of use according to the target parts as stated in table below. Please make sure that disinfectant agent is wiped off after disinfecting is completed.

### (A) Chlorine disinfectants

- Sodium dichloroisocyanurate solution (1% maximum)
- Sodium hypochlorite solution (1% maximum)

#### (B) Alcohol disinfectants

- Commercially available isopropyl alcohol solution (Up to 99 wt% can be used)
- Rubbing alcohol (76.9-81.4 vol% Ethanol, Isopropyl alcohol as an additive)

Parts	Usable disinfectant	Risk	
Plastic parts	Chlorine disinfectant only.	<ul> <li>Possibility of deterioration if alcohol disinfectant is used.</li> <li>Especially acrylic resin parts <ul> <li>General x-ray system Acrylic table top (transparent resin part)</li> <li>Collimator (front transparent resin part)</li> <li>Touch screen for mobile equipment dosimeter</li> </ul> </li> </ul>	
Metal parts without paint	Alcohol disinfectant only.	Possibility of deterioration if chlorine disinfectant is used.	

Table 1: Restriction of usable disinfectant according to the target parts



Please keep use of disinfectant agent to a minimum. Due to long-term disinfection, fading and cracking may occur in the exterior or resins. For example, rubber and plastics may deteriorate. If the product changes due to disinfecting, immediately stop using the product and request repair to your service representative.



Please do not spray disinfectant directly on the equipment. If disinfectant penetrates the device, it may cause malfunction or other problems. Please turn off the power during disinfecting. When turning on the power after disinfecting, please thoroughly ventilate the inside of the examination room. If flammable gas remains in the room, there is a potential for danger of ignition, smoke, explosion, or electric shock when turning on the system.

#### Examples of agents that can be used

List of disinfectant agents are extracted from the US Environmental Protection Agency (EPA) list of approved disinfectants for use against a new coronavirus infection (COVID -19).

This list does not guarantee the efficacy of disinfection.

Product name	company	Active ingredient	EPA registration number
Sani-Cloth Bleach Germicidal	DPI	Sodium hypochlorite	9480-8
Disposable Wipe			
PURELL Professional Surface	GOJO Industries	Ethanol	84150-1
Disinfectant Wipes			
Micro-kill Bleach Germicidal	Medline Industries	Sodium hypochlorite	37549-1
Bleach Wipes			
Clorox Healthcare <sup>®</sup> Bleach	Clorox Professional Products	Sodium hypochlorite	67619-12
Germicidal Wipes	Company		

This instruction is applicable to the products manufactured by Medical Systems Div., Shimadzu Corporation only.