



***GE Medical Systems***

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# **Technical Publications**

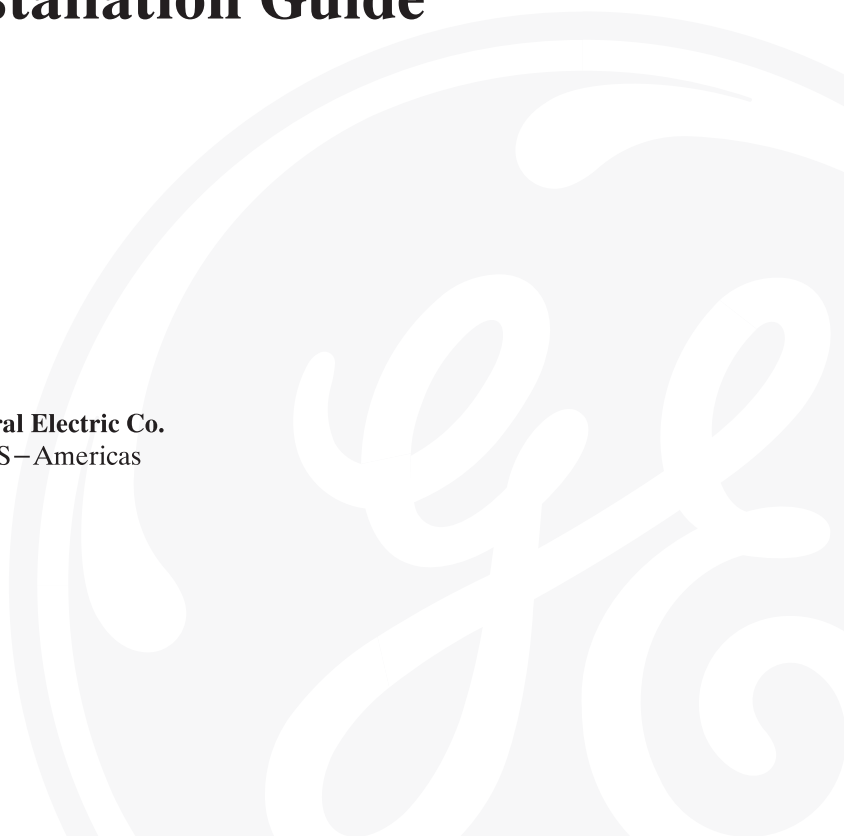
**Direction 46–030405**

**Revision 4**

## **GE Medical Systems LOGIQ™ 700 Preinstallation Guide**

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**Operating Documentation**



## Revision History

Please verify that you are using the latest approved revision of this document. Information pertaining to the final released versions of this document will be maintained on GPC (Global Product Configuration). Copies of this document are available from GE Technical Publications.

REV	DATE	CHANGES
0	March 25, 1994	Initial Document Release
1	August 12, 1994	Add catalogs, customer signature & more details to CHECKLIST
2	May 17, 1995	Implemented PCN 177080 which included GEMSE requests, adding V2 model numbers, suggesting ferroresonant UPS for certain line conditions, broadening environmental limits, adding probe kits and GE standard international warnings.
3	May 20, 1996	Updated for Catalogs, system identification, EMC
4	April 21, 1997	Updated for R6.2 DICOM Option

## List of Effective Pages

Title	Pages	Rev
Revision History	i	4
International Warning	ii & iii	4
Preinstallation	1 to 12	4

### WARNING

- This Service Manual is available in English only.
- If a customer's service provider requires a language other than English, it is the customer's responsibility to provide translation services.
- Do not attempt to service the equipment unless this service manual has been consulted and is understood.
- Failure to heed this Warning may result in injury to the service provider, operator or patient from electric shock, mechanical or other hazards.

### AVERTISSEMENT

- Ce Manuel de maintenance n'est disponible qu'en anglais.
- Si le technicien du client a besoin de ce manuel dans une autre langue que l'anglais, c'est au client qu'il incombe de le faire traduire.
- Ne pas tenter d'intervention sur les équipements tant que le manuel Service n'a pas été consulté et compris.
- Le non-respect de cet avertissement peut entraîner chez le technicien, l'opérateur ou le patient des blessures dues à des dangers électriques, mécaniques ou autres.

### WARNUNG

- Dieses Kundendienst-Handbuch existiert nur in englischer Sprache.
- Falls ein fremder Kundendienst eine andere Sprache benötigt, ist es Aufgabe des Kunden für eine entsprechende Übersetzung zu sorgen.
- Versuchen Sie nicht, das Gerät zu reparieren, bevor dieses Kundendienst-Handbuch nicht zu Rate gezogen und verstanden wurde.
- Wird diese Warnung nicht beachtet, so kann es zu Verletzungen des Kundendiensttechnikers, des Bedieners oder des Patienten durch elektrische Schläge, mechanische oder sonstige Gefahren kommen.

### AVISO

- Este Manual de Servicio sólo existe en inglés.
- Si algún proveedor de servicios ajeno a GEMS solicita un idioma que no sea el inglés, es responsabilidad del cliente ofrecer un servicio de traducción.
- No se deberá dar servicio técnico al equipo, sin haber consultado y comprendido este manual de servicio.
- La no observancia del presente aviso puede dar lugar a que el proveedor de servicios, el operador o el paciente sufran lesiones provocadas por causas eléctricas, mecánicas o de otra naturaleza.

## ATENÇÃO

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- Se un addetto alla manutenzione esterno alla GEMS richiede il manuale in una lingua diversa, il cliente è tenuto a provvedere direttamente alla traduzione.
- Si proceda alla manutenzione dell'apparecchiatura solo dopo aver consultato il presente manuale ed averne compreso il contenuto.
- Non tenere conto della presente avvertenza potrebbe far compiere operazioni da cui derivino lesioni all'addetto alla manutenzione, all'utilizzatore ed al paziente per folgorazione elettrica, per urti meccanici od altri rischi.

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- ・このサービスマニュアルには英語版しかありません。
- ・GEMS以外でサービスを担当される業者が英語以外の言語を要求される場合、翻訳作業はその業者の責任で行うものとさせていただきます。
- ・このサービスマニュアルを熟読し理解せずに、装置のサービスを行わないで下さい。
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## 注意:

- 本维修手册仅存有英文本。
- 非 GEMS 公司的维修员要求非英文本的维修手册时，客户需自行负责翻译。
- 未详细阅读和完全了解本手册之前，不得进行维修。
- 忽略本注意事项会对维修员，操作员或病人造成触电，机械伤害或其他伤害。

# Preinstallation Guide

## Objective

This booklet describes what information must be known, preparations made, and equipment available in order to install the LOGIQ™ 700. There's a checklist at the end to help you verify all tasks have been accomplished.



**Site preparation takes time. Begin Preinstallation checks at least six weeks prior to the desired delivery date to allow enough time to make any changes.**



**Have two people available to deliver and unpack the LOGIQ™ 700. Attempts to move the unit considerable distances or on an incline by one person could result in injury or damage or both.**

## Some System Catalogs

H470nMR	LOGIQ700 MR SYSTEM	(n: 0=120V, 1=220V, 2=240V, 3=200/100, 4=200/120)
H4710M	Archive Option MOD disk	
H4730PT	older unit may require PDI Plus Kit (CFP & CALM)	
H4740T	older unit may require 2105570-2 (EQ) for M probes	
H4710N	DICOM Option MOD disk	
H4740S	VIP Option MOD disk	
H4740P	MR Flow Option MOD disk	
H4740W	3D Option MOD disk	
H7039ML	M12L probe kit	
H7364MC	M3C probe kit	
H7348C	348c probe kit	
H7548C	548c probe kit	
H7618C	618c probe kit	
H7618E	618e probe kit	
H7546L	546L probe kit	
H7739L	739L probe kit	
H4700SC	On Board VCR and Color Printer	
H4710MB	2GB (P4) Hard Drive	

## Where you'll find the following topics:

What the customer needs to know . . . .	2-2	Electrical Requirements . . . . .	2-7
Environmental Requirements . . . . .	2-3	EMI Prevention . . . . .	2-8
Room Layouts . . . . .	2-4	Info needed from Site Admin . . . . .	2-9
Facilities . . . . .	2-5	Info needed for Net Config . . . . .	2-10
Physical Characteristics of the Unit . . . .	2-6	Sales/Service Preinstallation Checklist .	2-11

## Preparations and Responsibilities

### Purchaser Responsibilities

The work and materials needed to prepare the site is the responsibility of the purchaser. Delay, confusion, and waste of manpower can be avoided by completing preinstallation work before delivery. Use the Preinstallation checklist to verify that all needed steps have been taken. Purchaser responsibility includes:

- Procuring the materials required.
- Completing the preparations before delivery of the ultrasound system.
- Paying the costs for any alterations and modifications not specifically provided in the sales contract.
- Paying the phone line installation and monthly phone line charges



**All electrical installations that are preliminary to the positioning of the equipment at the site prepared for the equipment must be performed by licensed electrical contractors. Other connections between pieces of electrical equipment, calibrations, and testing must also be performed by qualified personnel. The products involved (and the accompanying electrical installations) are highly sophisticated and special engineering competence is required. All electrical work on these products must comply with the requirements of applicable electrical codes. The purchaser of GE equipment must only utilize qualified personnel to perform electrical servicing on the equipment.**

### Special Order Inquiry (SOI)

The desire to use a non listed or customer provided product or to place an approved product further from the system than the interface kit allows presents challenges to the installation. Follow local service policy on how to deal with this. In the Americas pole, a Special Order Inquiry (SOI) will need to be submitted and responded to **PRIOR** to sale. The SOI form is available through Wizard Mail under Common Forms, "SOI REQUEST."

### Suite Environment

The ultrasound suite must be clean prior to delivery of the machine. Carpet is not recommended because it collects dust and creates static. Potential sources of EMI (electromagnetic interference) should also be investigated before delivery. Dirt, static, and EMI can negatively impact system reliability.

## Environmental Requirements

### Types of Environments

In order for the LOGIQ™ 700 to operate well, its environment must not harm it. Care must be taken when it is transported or stored. Its operational environment must either be constantly maintained or the unit must be turned off. Avoid humidifiers because their moisture damages electronic parts.

Table 1–1 Environmental Limits

	Temperature	Humidity	Maximum Altitude
<b>Patient Comfort</b>	20 to 26°C (68 to 79°F)	50 to 70% noncondensing	
<b>Operational</b>	15 to 30°C (59 to 86°F)	5 to 85% noncondensing	3050 m (10,000 ft)
<b>Storage</b>	0 to 55 °C (30 to 130°F)	5 to 85% noncondensing	3050 m (10,000 ft)
<b>Transport</b> (for less than 16 hrs)	–20 to 55°C (–4 to 130°F)	5 to 85% noncondensing	10,600 m (35,000 ft)

### Recommended Settle In Time

After being transported, the unit may be very cold or hot. If this is the case, allow the unit to acclimate before you power it on. We recommend a one hour wait for each 2.5°C increment its temperature is below 15°C or above 30°C. It would probably be ok to wait just one hour per 15°C increment the temp is outside the unit's operating range. This is translated in the table below.

°C	–40	–35	–30	–25	–20	–15	–10	–5	0	5	10	15	20	25	30	35	40	45	50	55
°F	–40	–31	–22	–13	–4	5	14	23	32	41	50	59	68	77	86	95	104	113	122	131
<b>Best hrs</b>	22	20	18	16	14	12	10	8	6	4	2	0	0	0	0	2	4	6	8	10
<b>OK hrs</b>	3.6	3.3	3	2.6	2.3	2	1.6	1.3	1	.6	.3	0	0	0	0	.3	.6	1	1.3	1.6

### Consequences of ignoring these temperature precautions

If a very cold machine is powered on, condensation will form on the electronic components which could damage the hard drive, VCR, boards. If a very hot machine is powered on, the host will shut down operation, or the power supplies will stop working. Electronic components could fail; plastic parts could deform.

### Cooling Requirements

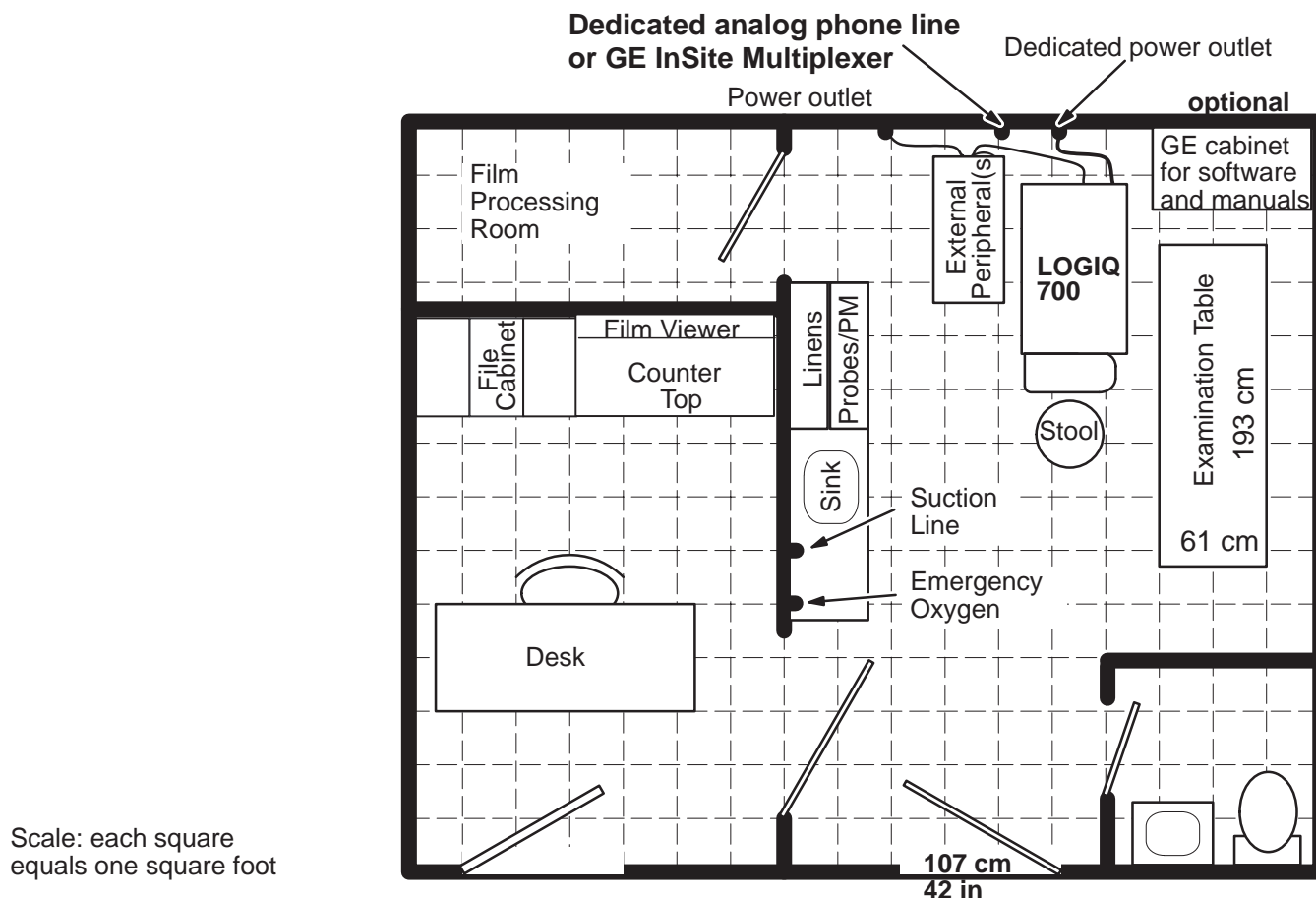
The cooling requirement for the LOGIQ™ 700 is 6500 BTU/hr. This does not include cooling needed for lights, people, or other equipment in the room. Each person in the room places a 300 BTU/hr demand on the cooling system.

### Lighting Requirements

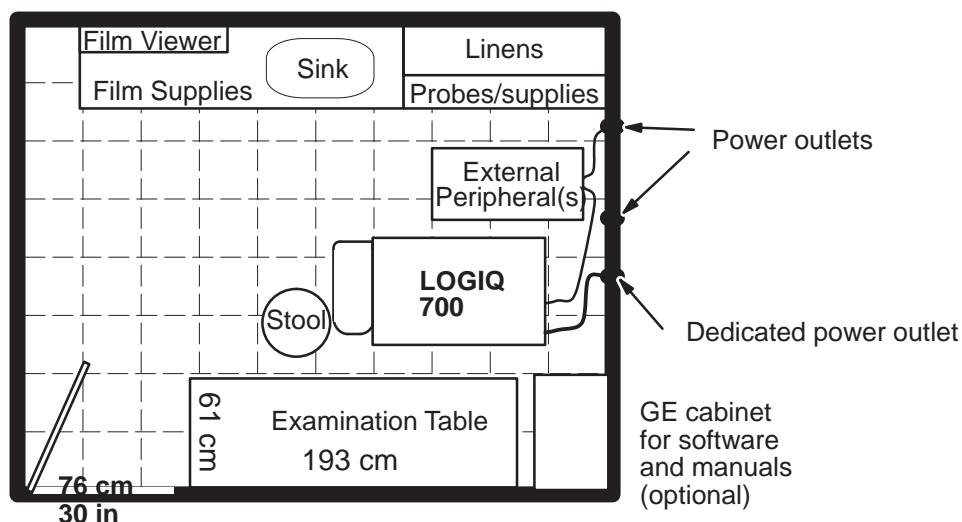
Bright light is needed for system installation, updates and repairs. However, operator and patient comfort may be optimized if the room light is subdued and indirect. Therefore a combination lighting system is recommended. Lighting controls and dimmers can be a source of EMI which could degrade image quality. These controls should be selected to minimize possible interference.

## Room Layouts

**Illustration 1-1 A 4.3m x 5.2m (14 by 17 foot) Recommended Floor Plan Plan**



**Illustration 1-2 A 2.5m x 3m (8 by 10 foot) Minimal Floor Plan**





## Facilities

### Required

- **Dedicated single branch power outlet** of adequate amperage (see Electrical Requirements on page NO TAG) meeting all local and national codes is less than 2.5 m (8 ft) from the unit's proposed location
- Door opening is at least 76 cm (30 in) wide
- Proposed location for unit is at least 0.3 m (1 ft) from the wall for cooling
- Power outlet and place for any external peripheral are within 2 m (6.5 ft) of each other with peripheral within 1 m of the unit to connect cables.

*The LOGIQ™ 700 has four outlets inside the unit. One is for the monitor and three for on board peripherals. There is also one power outlet under the air filter for the service engineer to use for test equipment that does not exceed the power rating listed below the outlet.*

- Power outlets for other medical equipment and gel warmer
- Power outlets for test equipment and modem within 1 m (3.2 ft) of unit
- Clean, protected space to store transducers (in their cases or on a rack)
- Material to safely clean probes (done with a plastic container, never metal)
- For InSite to be installed, the site needs either a dedicated, analog phone line with a modular jack for the modem or a GE InSite Multiplexer setup.

### Desirable

- Door is at least 92 cm (3 ft) wide
- Circuit breaker for dedicated power outlet is easily accessible
- Sink with hot and cold water
- Receptacle for bio-hazardous waste, like used probe sheaths
- Emergency oxygen supply
- Film viewer
- Storage for linens, film, equipment
- Nearby waiting room, lavatory, and dressing room
- Dual level lighting (bright and dim)
- Lockable cabinet ordered by GE for its software and proprietary manuals

## Physical Characteristics of the Unit

Size	Console Size	Shipping Size
Height	151 cm (60 in)	173 cm (68 in)
Width	65.6 cm (26 in)	87 cm (34 in)
Depth	121 cm (48 in)	142 cm (56 in)

### Weight

The unit weighs about **360 kg or 800 pounds**. The shipping weight is about **400 kg (880 lbs)** with the packaging, pallet, and two peripherals included. The V2 unit is a little heavier due to the two cage shields it has.

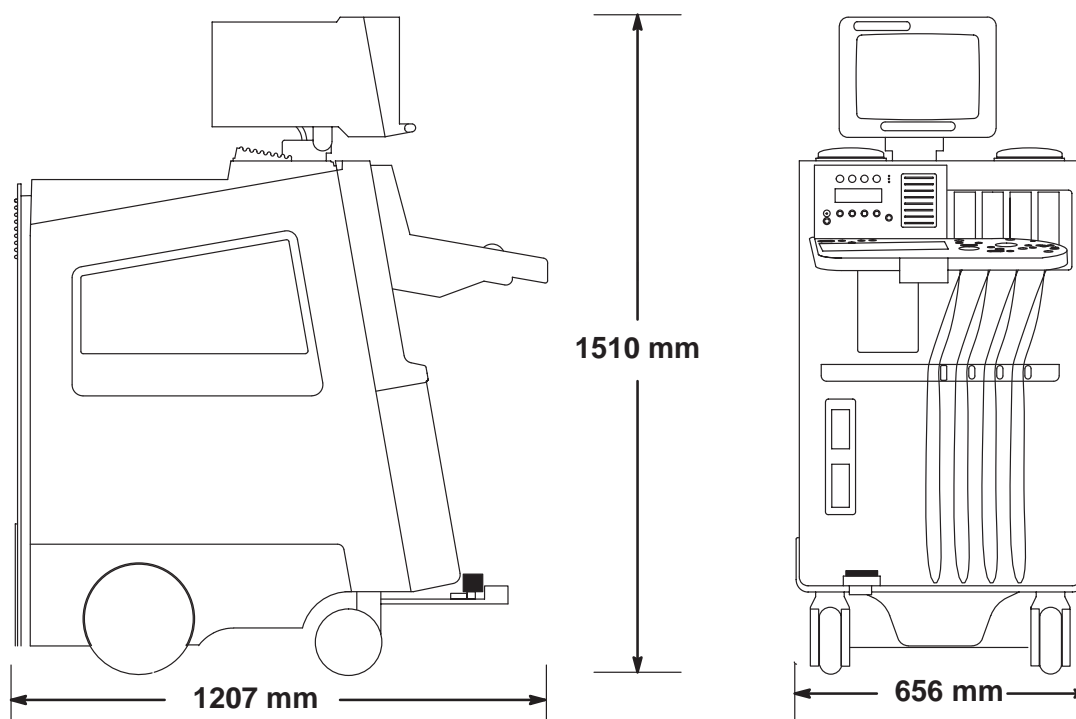
### Floor Load

Given the unit's weight, distance between its wheels, and estimating the on board peripheral weight, the floor load is approximately 1500 kg/m<sup>2</sup> (300 lbs/ft<sup>2</sup>).

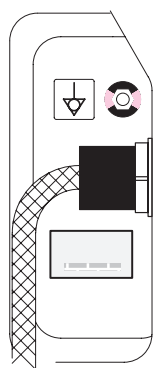
### Acoustic Noise Output

The acoustic noise output is **60 dB max** when measured at 0.45 m (1.5 ft) from the operator panel at a height of 1.52 m (5 feet).

### Illustration 1–3 Machine Dimensions



### Illustration 1–4 Identifying whether unit is a V1 or V2



**V1 Model is**  
**46–312100Gn**

#### One example:

GENERAL ELECTRIC COMPANY  
MILWAUKEE, WISCONSIN MADE IN U.S.A.  
MODEL 46–312100G6  
S/N 3674US3  
MANUFACTURED SEPTEMBER 1996  
DESC LOGIQ 700  
120V~  
60Hz 12.8A

**V2 Model is**  
**2132700–n**

**It has the CE Mark labels**  
**One example:**



GENERAL ELECTRIC COMPANY  
MILWAUKEE, WISCONSIN MADE IN U.S.A.  
MODEL 2132700–3  
S/N 1234US7  
MANUFACTURED JUNE 1996  
DESC LOGIQ 700  
240V~  
50 Hz 10A

## Electrical Requirements

### CAUTION



#### POWER OUTAGE MAY OCCUR

The LOGIQ™ 700 requires a dedicated single branch circuit. To avoid circuit overload and possible loss of critical care equipment, make sure you **DO NOT** have any other equipment operating on the same circuit.

### Possible Line Voltage Configurations

The LOGIQ™ 700 can be configured for these AC voltages:

V1 model	V2 model	V3 model	system power	peripheral power
46-312100G1	2132700	2148800	120 V 20 Amp line	500 VA allocated for 120 V peripherals
46-312100G2	2132700-2	2148800-2	220 V 10 Amp line	500 VA allocated for 120 V peripherals
46-312100G3	2132700-3	2148800-3	240 V 10 Amp line	500 VA allocated for 240 V peripherals
46-312100G4	2132700-4	2148800-4	200 V 10 Amp line	500 VA allocated for 100 V peripherals
46-312100G5	2132700-5	2148800-5	200 V 10 Amp line	500 VA allocated for 120 V peripherals
46-312100G6	2132700-6	2148800-6	120 V <b>20 Amp</b> line 15A plug	<b>200 VA</b> allocated for 120 V peripherals

#### Check stability

Monitor the site's line voltage for a week before installation. It should be stable. The line voltage should remain within 10 % of the unit's rated value. Line frequency should fall between 47 and 63 Hertz.

#### Power Transients

Power transients must be less than 25% over nominal peak voltage for less than 1 ms for any type of transient. This includes line frequency, synchronous, asynchronous, or aperiodic transients.



**If the site's power line voltage does not meet the requirements outlined, it is suggested that a ferro resonant Uninterruptable Power Supply (UPS) be provided. A tap switching line conditioner is not recommended as it can have large switching transients which may exceed the maximum level specified for the LOGIQ™ 700.**

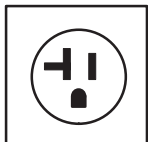
#### Inrush Current

For the 120 V site, inrush current is 150 to 175 A for up to four ms. For other power configurations with the Soft Start design, inrush will be less than 70 A.

#### About the Site Circuit Breaker

It is recommended that the branch circuit breaker for the machine be readily accessible. It should have at least a five times the rated current tolerance.

#### About the Power Outlets



The AC power outlet must be dedicated and within reach of the unit without extension cords. Other outlets adequate for the external peripherals, medical and test equipment needed to support this unit must also be present within 1 m (3.2 ft) of the unit. Electrical installation must meet all current local, state, and national electrical codes.

#### About the Power Plug

If the unit arrives without a power plug, or the wrong plug, the installation engineer must supply what is locally required.

120 V	15 or 20 Amp	NEMA 5-20 or 5-15 (hospital grade)
200 V	10 Amp	NEMA L6-20
220/240 V	10 Amp	depends on local code

## EMI Prevention



**Consult GE Medical Systems if strong EMI (electromagnetic interference) fields are known or suspected to be present at the customer site.**

### Problem

Ultrasound machines are susceptible to electromagnetic interference from radio frequencies, magnetic fields, and transients in the air or wiring. They also generate EMI. The LOGIQ™ 700 complies with limits for a Group 2, Class A Medical Device as stated in EN 60601–1–2. However there is no guarantee that interference will not occur in a particular installation. If this equipment is found to cause or react to interference, the user or qualified service personnel should attempt to correct the problem.

### External Sources of EMI

Possible EMI sources should be identified before the unit is installed. Electrical and electronic equipment may produce EMI unintentionally as the result of a defect. These sources may include medical lasers, scanners, cauterizing guns, computers, monitors, fans, gel warmers, microwave ovens, light dimmers and portable phones. The presence of a broadcast station or broadcast van may also cause interference.

**Table 1–2 How to prevent or lessen EMI**

EMI rule	Details
<b>Be aware of RF sources</b>	Keep the unit at least 5 meters or 15 feet away from other EMI sources. Special shielding may be required to eliminate interference problems caused by high frequency, high powered radio or video broadcast signals.
<b>Ground the unit</b>	Poor grounding is the most likely reason a unit will have noisy images. Check grounding of the power cord and power outlet.
<b>Replace all screws, RF gaskets, covers, cores</b>	After you finish repairing or updating the system, replace all covers and tighten all screws. On the V2 unit any cable with an external connection requires a magnet wrap at each end. And tightly wrap the mesh around the I and Q connectors on the SS. And install the covers over the front of both card cages. Loose or missing covers or RF gaskets allow radio frequencies to interfere with the ultrasound signals.
<b>Replace broken RF gaskets</b>	If more than 20% or a pair of the fingers on an RF gasket are broken, replace it. Don't power ON the unit until any loose metallic part is removed.
<b>Do not place labels where RF gaskets touch metal</b>	If your system needs a label, never place it where RF gaskets meet the unit because a gap will be created where RF can leak. Or if a label has been placed in such a position, move it where it will not interfere with a tight seal.
<b>Use GE specified harnesses and peripherals</b>	In the V2 unit, the interconnect cables are grounded and require EMI magnets and other shielding. Be sure to use these. Cable length, material, and routing are all important; do not change from what is specified.
<b>Take care with cellular phones</b>	Cellular phones may transmit a 5 V/m signal; a signal greater than 3 V/m could cause image artifacts. Use a regular phone within 5 m (16 ft) of the unit.
<b>No power line filters</b>	Filters placed between the power main and unit may cause problems; do not use one unless authorized by GE Engineering.
<b>Properly dress peripheral cables</b>	Do not allow cables to lie across the top of the Front End cage. Loop the excess length for peripheral cables inside the right end of peripheral cover. Attach the monitor cables to the frame.

## Information needed from Admin

### From the Site System Administrator

To configure the LOGIQ™ 700 to work with other network connections, you will need to get the following information from the site administrator.

- a host name, port number, AE Title, IP address and Net Mask for the LOGIQ™ 700
- the IP addresses for the default gateway and other routers at the site
- the host name, IP address, port and AE Title for each device the site wants connected to the LOGIQ™ 700

### Net Information Form

#### Illustration 1–5 The information needed from system administrator

Diagnostic PC    Host Name     Port     IP Address  .  .  .   
Net Mask  .  .  .

LOGIQ 700  
Host Name     Local Port     IP Address  .  .  .   
AE Title     Net Mask  .  .  .

#### ROUTING INFORMATION

	Destination IP Addresses	Default	GATEWAY	IP Addresses
ROUTER1	<input type="text"/> . <input type="text"/> . <input type="text"/> . <input type="text"/>		<input type="text"/>	<input type="text"/> . <input type="text"/> . <input type="text"/> . <input type="text"/>
ROUTER2	<input type="text"/> . <input type="text"/> . <input type="text"/> . <input type="text"/>		<input type="text"/>	<input type="text"/> . <input type="text"/> . <input type="text"/> . <input type="text"/>
ROUTER3	<input type="text"/> . <input type="text"/> . <input type="text"/> . <input type="text"/>		<input type="text"/>	<input type="text"/> . <input type="text"/> . <input type="text"/> . <input type="text"/>

#### DICOM APPLICATION INFORMATION

	NAME	AE TITLE	IP ADDR	PORT
Store 1	<input type="text"/>	<input type="text"/>	<input type="text"/> . <input type="text"/> . <input type="text"/> . <input type="text"/>	<input type="text"/>
Store 2	<input type="text"/>	<input type="text"/>	<input type="text"/> . <input type="text"/> . <input type="text"/> . <input type="text"/>	<input type="text"/>
Print 1	<input type="text"/>	<input type="text"/>	<input type="text"/> . <input type="text"/> . <input type="text"/> . <input type="text"/>	<input type="text"/>
Print 2	<input type="text"/>	<input type="text"/>	<input type="text"/> . <input type="text"/> . <input type="text"/> . <input type="text"/>	<input type="text"/>
Print 3	<input type="text"/>	<input type="text"/>	<input type="text"/> . <input type="text"/> . <input type="text"/> . <input type="text"/>	<input type="text"/>
Print 4	<input type="text"/>	<input type="text"/>	<input type="text"/> . <input type="text"/> . <input type="text"/> . <input type="text"/>	<input type="text"/>
Sched	<input type="text"/>	<input type="text"/>	<input type="text"/> . <input type="text"/> . <input type="text"/> . <input type="text"/>	<input type="text"/>

#### PHYSICAL LOCATION

Store 1	<input type="text"/>
Store 2	<input type="text"/>
Print 1	<input type="text"/>
Print 2	<input type="text"/>
Print 3	<input type="text"/>
Print 4	<input type="text"/>
Sched	<input type="text"/>

## Information needed for Net Config

The DICOM Option means both the locally connected peripherals and remotely connected DICOM devices that are properly defined in the LOGIQ™ 700 Presets can be used by the operator. With R6.2, up to four keys can be assigned to print or copy images. And each one of those keys can cause more than one action to occur. It can cause both local and remote actions. It can transfer the image as a file with color information or just grayscale data.

### From the Customer

To Preset the Print keys, you must ask the customer what activities they want each of four keystrokes to initiate. Make a note of what particular device it is and its IP address or other details if you find this helpful.

**Table 1–3                      Worksheet to collect desired Network Operation Data**

	Device Name	P1	P2	Shift+ P1	Shift+ P2
This key will send GRAY image file					
This key will send COLOR image file					
print image to device connected to Port 1					
print image to device connected to Port 2					
print image to device connected to Port 3					
print image to device connected to Print					
print image to device connected to Expose					
copy image to DICOM workstation A					
copy image to DICOM workstation B					
print image to DICOM device A					
print image to DICOM device B					
print image to DICOM device C					
print image to DICOM device D					

## Sales/Service Preinstallation Checklist

Scheduled Arrival Date	Salesperson
Customer	FDO #
Equipment	Room #

YES	NO	n/a	Requirements Checklist
			<b>Electrical</b>
			To avoid circuit overload and possible loss of critical care equipment, no other equipment can be on the same circuit. A dedicated single branch outlet of adequate amperage that meets all local and national electrical codes <b>MUST BE</b> available within the range of the machine's power cord. It can be 3 or 4.5 m (10 or 15 feet) long.
			Line voltage is within 10% of rated value. No transients greater than 25% over nominal peak voltage nor longer than 1 ms in duration occur.
			At least one outlet on another branch is available for power tools, test equipment, or modem. It must be within 1 m (3.2 ft) of the unit.
			Outlets are available for the desired number of external peripherals. Each outlet must be within 2 m (6.5 ft) of its peripheral.
			If the site requires a leakage current checkout by a biomedical electronic technician, arrange an appointment with those involved and if possible with local service also.
			Leakage Current test equipment is available. The 120 VAC machine that has a 20 A plug may require a test adapter; the probe tests may require another.
			<b>Environmental/Facilities</b>
			Hardcopy of recommended layout and facilities is left with the customer.
			No known sources of RFI/EMI or issues seen such as PC's, alarm systems, medical scanners, broadcast stations, broadcast vans in the area.
			If sources of RFI/EMI are suspected, a site survey request has been made to the Regional Ultrasound EMI Specialist.
			If desired, a lockable storage cabinet for manuals, software has been ordered for the site by the local service office. LG: 46-194427P299 SM: 46-194427P253
			1) A Dial In Direct (DID) modular phone jack is within 1 m (3.2 ft) of the unit's back panel. Either an analog line without extensions or connections to a switchboard –or– 2) a GE InSite Multiplexer will be installed.
			The finished wall, floor (preferably not carpeted) and ceiling are installed. Door can be locked. Room and corridors are dirt and dust free.
			Room lighting is adequate. Both bright and dim lights are available.
			The air conditioning is operating and stable. The machine alone requires 6500 BTU/hr. Two people add about another 600 BTU/hr. Room temperature stays between 18 and 26°C (65 and 78°F).

## Sales/Service Preinstallation Checklist, continued

YES	NO	n/a	Preinstallation Checklist
			<b>Peripherals/Options</b>
			A shelf, cart or table is available to support external peripherals which must be within 1 m (3.2 ft) of the system's back panel. (See current Price List for compatible peripherals)
			For a GE provided peripheral that GE does not service (i.e. Kodak Lasercam), arrangements have been made with the vendor or dealers to install/ service it.
			If a laser camera is ordered, the correct installation kit(s) is also ordered. (See Price List for compatible interface kits. Cable lengths are also listed.)
			When the customer desires to interface the LOGIQ™ 700 to a non-listed or customer provided product, or to place an approved peripheral further from the unit than the interface kit allows, follow local service policy. In the Americas pole an SOI must be submitted and responded to by headquarters <b>PRIOR</b> to the sale. The SOI is paid either by the customer or it becomes a sales expense. The SOI form is available on Wizard mail.
			The vendor of the non-listed or customer provided peripheral has been informed of the desired hookup date.
			Get the network configuration details from the site's system administrator. Get the desired control panel operation from the customer who also needs to provide the network cabling and a 500V isolation device on the ethernet port.
			<b>Transportation/Delivery</b>
			Two people available to deliver and unpack.
			If the site has no loading dock, arrange for a van with a lift gate.
			Access to equipment room is not precluded by inadequate door widths, steep or narrow ramps, elevators too small to enter, etc. If so, an alternate path has been identified.
			Place to unpack is available. Since the pallet is 87 cm (34 in) wide, the shipping crate requires passages wider than 90 cm (36 in).
			If old equipment needs to be removed/packed, arrangements with the customer or GE have been made.

Comments

Inspection Dates	
Salesperson Signature	Date
U/S Accounts FE Approval	Date
Customer Apprised	Date



For your notes

### **DAMAGE IN TRANSPORTATION**

All packages should be closely examined at time of delivery. If damage is apparent, write “**damage in shipment**” on all copies of the freight or express bill before delivery is accepted or “signed for” by a General Electric representative or hospital receiving agent. Whether noted or concealed, damage **MUST** be reported to the carrier immediately upon discovery, or in any event, within 14 days after receipt, and the contents and containers held for inspection by the carrier. A transportation company will not pay a claim for damage if the inspection is not requested within this 14 day period.

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