



GE Medical Systems

Direction 2174207

**LOGIQ 500/400
Advanced Vascular Calculations
Software Option**

H4550TY

This page intentionally left blank.



GE Medical Systems

Technical Publications

Direction 2174207

Revision 1

LOGIQ 500/400 Advanced Vasculature Calculation Software Option Installation Manual

Copyright © 1996, 1999 By General Electric Co.

Operating Documentation



GE Medical Systems

*GE Medical Systems: Telex 3797371
P.O. Box 414, Milwaukee, Wisconsin 53201 U.S.A.
(Asia, Pacific, Latin America, North America)*

*GE Medical Systems — Europe: Tel: +49 (0) 212 28 02 208
Beethovenstraße 239, Postfach 11 05 60, D-42655 Solingen
GERMANY*

Safety Warnings

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

- Este Manual de Assistência Técnica só se encontra disponível em Inglês. Se qualquer outro serviço de assistência técnica, que não a GEMS, solicitar estes manuais em outro idioma, é da responsabilidade do cliente fornecer os serviços de tradução. Não tente reparar o equipamento sem ter consultado e compreendido este Manual de Assistência Técnica. O não cumprimento deste aviso pode por em perigo a segurança do técnico, operador ou paciente devido à choques elétricos, mecânicos ou outros.

AVVERTENZA

- Il presente manuale di manutenzione è disponibile soltanto in inglese. 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.

警告

- ・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。
- ・この警告に従わない場合、サービスを担当される方、操作員あるいは患者さんが、感電や機械的又はその他の危険により負傷する可能性があります。

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。

Revision History

REV	DATE	REASON FOR CHANGE
0	November 1, 1996	Initial Release
1	October 21, 1999	Add Option On/Off Numbers

LIST OF EFFECTIVE PAGES

PAGE NUMBER	REVISION NUMBER	PAGE NUMBER	REVISION NUMBER
Cover Page			
Title Page	1		
Language Warnings i and ii	1		
Revision History A and B	1		
Procedure 1 thru 2	1		

Please verify you are using the latest revision of this document. Information pertaining to this document is maintained on GPC (Global Product Configuration). If you cannot access GPC, contact your Service Support Center.

This page left blank intentionally.

SECTION 1 – Installation

1-1 Introduction

LOGIQ™ 500/400 Software Options which include PDI (Power Doppler Imaging) Package, OB Calculations Package, Vascular Calculations Package, Advanced OB Calculations and Advanced Vascular Calculations are shipped from GE YMS turned off.

Shipping systems with these software packages turned off allows for tighter inventory control since we can deal with importing only one standard configuration.

Options NOT purchased by the customer should NOT be turned on.

1-2 Tools Required

NONE

1-3 Time Required

Approximately 30 minutes.

1-4 Parts/Documentation Required

1.	LOGIQ™ 500 User Documentation	
2.	LOGIQ™ 500 Service Manual	P9030TA
3.	LOGIQ™ 500 Proprietary Manual	P9030TB
4.	LOGIQ™ 400 User Documentation	
5.	LOGIQ™ 400 Service Manual	2127661
6.	LOGIQ™ 400 Proprietary Manual	2127662

1-5 Functional Check-out

Perform functional checks to verify that the system is functioning properly prior to installing any peripherals. Refer to the Functional Checks in Chapter 4 of the Service Manual.

1-6 Procedure

READ and UNDERSTAND these instructions thoroughly before proceeding with the installation. Perform each step in sequence and check it off when completed. If a problem occurs after completion, go back through the procedure and check for implementation errors before contacting your Ultrasound Region Engineer or the Online Center for assistance.

1. Ensure that all other installation procedures are completed and determine that the LOGIQ™ 500/400 is functioning properly prior to enabling (turning on) any authorized software options.

Turn on Advanced Vascular Calculations

2. Refer to the LOGIQ™ 500 Proprietary Manual (P9030TB) or LOGIQ™ 400 Proprietary Manual (2127662), section 2–4 for information on how to enter the service menu and select **03 Option Set**.
3. Refer to the LOGIQ™ 500 Proprietary Manual (P9030TB) or LOGIQ™ 400 Proprietary Manual (2127662), section 2–4–2 for information on how to install the software options purchased by the customer. For Advanced Vascular Calculations ensure that option number **12** is turned off and option number **26** is turned on.

Final Checkout

1. Check to ensure that all option packages installed are functional.
2. Refer to the LOGIQ™ 500 and LOGIQ™ 400 and ensure that the Advanced Vascular Calculations package functions normally.
3. When all functionality is verified, the software option installation is complete.