



*GE Medical Systems
Training In Partnership*

LOGIQ™ 500
User Quick Guide 2193742-100
A Training in Partnership Program

TiP™



L



GE Medical Systems

**Technical
Publications**

**Direction 2193742–100
Revision 0**

LOGIQ™ 500 User Quick Guide

CE 0459

Copyright © 1997 By General Electric Co.

Operating Documentation



Regulatory Requirement

This product complies with regulatory requirements of the following European Directive 93/42/EEC concerning medical devices



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
283 rue de la Minière BP34
78533 BUC Cedex



| REV | DATE | REASON FOR CHANGE |
|-----|-------------------|-------------------|
| 0 | September 9, 1997 | Initial Release |

LIST OF EFFECTIVE PAGES

| <u>PAGE NUMBER</u> | <u>REVISION NUMBER</u> | <u>PAGE NUMBER</u> | <u>REVISION NUMBER</u> |
|-----------------------------|----------------------------|---------------------------|----------------------------|
| TiP Cover Page | N/A | Image Memory 1 thru 4 | 0 |
| Title Page | 0 | Cine Memory 1 thru 6 | 0 |
| Revision History A and B | 0 | User Define Keys 1 thru 6 | 0 |
| Table of Contents i thru vi | 0 | Annotation 1 thru 12 | 0 |
| Safety 1 thru 6 | 0 | Body Patterns 1 thru 10 | 0 |
| Introduction 1 thru 16 | 0 | Measurements 1 thru 20 | 0 |
| Initial Set Up 1 thru 10 | 0 | User OB Tables 1 thru 12 | 0 |
| Scanning 1 thru 18 | 0 | User Presets 1 thru 24 | 0 |



Please verify that you are using the latest revision of this document. Information pertaining to this document is maintained on GPC (GE Medical Systems Global Product Configuration). If you need to know the latest revision, contact your distributor, local GE Sales Representative or in the USA call the GE Ultrasound Clinical Answer Center at 1-800-682-5327 or 414-524-5255.



Table of Contents

| | |
|-------------------------|---|
| TiP Cover Page | |
| Title Page | |
| Revision History | A |
| Table of Contents | i |

Safety

| | |
|--|----------|
| Prescription Device (for USA only) | Safety 2 |
| Indications for Use | Safety 2 |
| Contraindications | Safety 3 |
| Serviceable Components | Safety 4 |
| User Manual | Safety 4 |
| Troubleshooting | Safety 4 |

Introduction

| | |
|----------------------|----------------|
| Major Features | Introduction 2 |
| Probe Ports | Introduction 4 |
| Password Ask | Introduction 5 |
| Power On | Introduction 6 |
| Power Off | Introduction 8 |
| Keyboard | Introduction 9 |



Initial Set Up

| | |
|--------------------------|------------------|
| Set Up Menu Access | Initial Set Up 2 |
| Hospital Name | Initial Set Up 3 |
| Date/Time | Initial Set Up 4 |
| System ID Number | Initial Set Up 7 |
| Language Selection | Initial Set Up 8 |
| Display Format | Initial Set Up 9 |

Scanning

| | |
|------------------------|------------|
| Patient ID Menus | Scanning 2 |
| Report Pages | Scanning 8 |

Image Memory

| | |
|-----------------------|----------------|
| Memory Storage | Image Memory 2 |
| Storage Display | Image Memory 3 |
| Memory Recall | Image Memory 3 |

Cine Memory

| | |
|--------------------------|---------------|
| Cine Storage | Cine Memory 2 |
| Cine Image Display | Cine Memory 3 |
| Cine Loop Review | Cine Memory 4 |
| Exit Cine | Cine Memory 6 |



User Define Keys

| | |
|--------------------------|--------------------|
| Purpose | User Define Keys 2 |
| Programming | User Define Keys 2 |
| Special Keystrokes | User Define Keys 3 |
| Lock/Unlock | User Define Keys 4 |
| Deleting | User Define Keys 5 |

Image Annotation

| | |
|---------------------------|---------------------|
| Overview | Image Annotation 2 |
| Special Keys | Image Annotation 3 |
| Comment Presets | Image Annotation 5 |
| Language Symbols | Image Annotation 7 |
| Annotation Library | Image Annotation 8 |
| Editing Annotations | Image Annotation 12 |

Body Patterns

| | |
|---|------------------|
| Overview | Body Patterns 2 |
| Body Patterns Available | Body Patterns 3 |
| Customizing Body Pattern Packages | Body Patterns 7 |
| Selecting a Body Pattern Package | Body Patterns 10 |



Measurements

| | |
|---------------------------------|-----------------|
| Measurement Controls | Measurements 2 |
| Measurement Key Functions | Measurements 3 |
| Measurement Cursors | Measurements 4 |
| Erasing Measurements | Measurements 4 |
| Measurement Unit Format | Measurements 5 |
| B-Mode Measurements | Measurements 6 |
| Doppler Mode Measurements | Measurements 10 |
| M-Mode Measurements | Measurements 15 |
| CFM B-Mode Measurements | Measurements 18 |
| Measurement Clear | Measurements 20 |

User OB Tables

| | |
|---|------------------|
| Overview | User OB Tables 2 |
| Programming a User Table | User OB Tables 3 |
| Adding a User Table to the Measurement Menu | User OB Tables 8 |
| Adding a Table to the Report Page | User OB Tables 8 |



User Presets

| | |
|-----------------------------------|-----------------|
| Overview | User Presets 2 |
| Defining a User Preset | User Presets 3 |
| Deleting a User Preset/Name | User Presets 6 |
| Recall Preset | User Presets 6 |
| Archiving User Presets | User Presets 7 |
| Loading User Presets | User Presets 9 |
| Index of Preset Parameters | User Presets 11 |



This page left blank intentionally.



Safety

Prescription Device
Indications for Use
Contraindications
Servicable Components
User Manual
Troubleshooting

This chapter emphasizes precautions to be aware of when working with the LOGIQ™ 500. Refer to the *Safety* and *User Maintenance* chapters in the LOGIQ™ 500 User Manual for more thorough explanations.



Prescription Device (for USA only)

CAUTION: United States law restricts this device to sale or use by or on the order of a physician.

Indications for Use

General

The LOGIQ™ 500 is a general purpose ultrasound imaging system intended for use in the dynamic evaluation of soft tissue and vascular diseases in the following areas:

1. Head, Neck, Chest, Abdomen & Pelvis
2. Male reproductive organs, Female reproductive organs
3. Pregnant uterus
4. Limbs/Extremities
5. Cardiac



Indications for use (cont'd)

Fetal Doppler

The LOGIQ™ 500 system can be used for fetal examination in Pulsed Wave Doppler, Continuous Wave Doppler, Color Flow Doppler, and Color M-Mode for the diagnosis of:

1. Structural fetal cardiac anomalies for high-risk patients.
2. Intrauterine growth retardation (IUGR) for high-risk patients with one or more of the following known or suspected conditions:
 - a. Multiple pregnancy & Maternal hypertension
 - b. Hydrops & Diabetes
 - c. Lupus & Placenta abnormality

Contraindications

The LOGIQ™ 500 is **NOT** intended for use in the following areas:

1. Ophthalmic use (or any use causing the acoustic beam to pass through the eye).
2. Pulsed Wave Doppler, Continuous Wave Doppler, Color Flow Doppler, and Color M-Mode are not intended for routine fetal examination or screening nor are they intended for fetal examination in a low-risk population. The use of Doppler, even at minimal output levels, in fetal examination must be adjunctive with conventional fetal echocardiography and other clinical diagnostic methods, for high risk patients only.



Serviceable Components

DANGER



The LOGIQ™ 500 contains no user serviceable components. To avoid electrical shock hazard, do not remove panels or covers from the console. Failure to do so could cause serious injury. Servicing must be performed by qualified service personnel only.

Refer to the LOGIQ™ 500 Service Manual (P9030TA) for additional maintenance guidance.

User Manual

Read and understand the LOGIQ™ 500 User Manual prior to operating the system. Keep the User Manual with the system for quick and easy reference.

Troubleshooting

Who to Contact

If additional information, assistance or maintenance is needed, contact the local Applications, Sales or Service Representative.



Troubleshooting (cont'd)

Trouble Images

Should the LOGIQ™ 500 ever have a problem imaging, the system has the capability of saving as many as eight trouble images on the hard disk drive. Simply freeze the trouble image. Press **Ctrl, W** simultaneously. The message “In progress. Please wait.” is displayed while the image is being saved.

After the image has been saved, the message “Input comment? ‘y’ or ‘n’ ” is displayed. Press ‘y’ to add a maximum of 42 characters as comments to the trouble image file. Press ‘n’ for no comments.

After image number eight is saved, there is a warning to indicate the disk space is full. The ninth attempt to save a trouble image will require writing over the first image, etc. (first in, first out).

NOTE: Trouble images do not display Patient Name, ID or Hospital Name information. That portion of the image is blanked out and will not be shown when the file is recalled for display.



This page left blank intentionally.



Introduction

Major Features

Probe Ports

Password Ask

Power On

Power Off

Keyboard

This chapter is an introduction to the basic features of the system console and the power up procedure of the LOGIQ™ 500. Refer to the *Getting Started* chapter in the LOGIQ™ 500 User Manual for more thorough explanations.

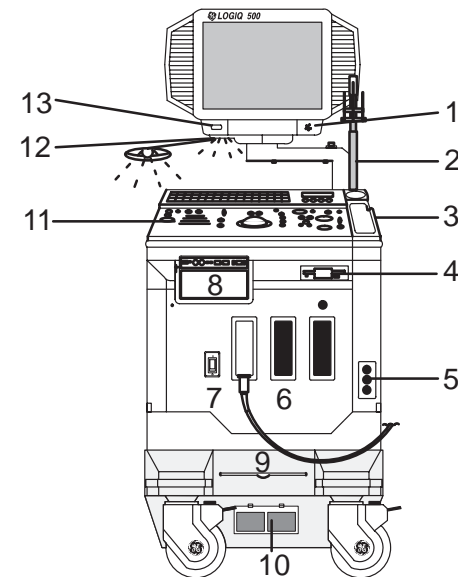


Major Features

The following are major features of the LOGIQ™ 500 system console. Most features come with the standard configuration, while other features are options to the standard console.

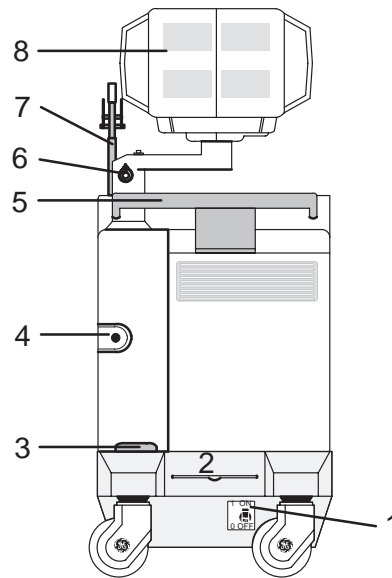
- | | |
|--------------------------|--------------------------|
| 1 – VCR Microphone | 8 – B/W page Printer * |
| 2 – Probe Cable Arm * | 9 – Air Filter |
| 3 – Probe Holder | 10 – Power Supply Filter |
| 4 – MOD Drive | 11 – Keyboard |
| 5 – Physio Panel * | 12 – Keyboard Task Light |
| 6 – Probe Connectors (3) | 13 – Task Light Switch |
| 7 – On/Off Switch | |

* = optional feature or accessory





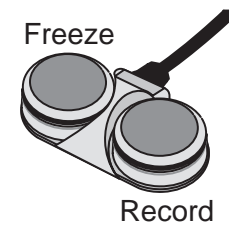
Major Features (cont'd)



- 1 – Circuit Breaker
- 2 – Air Filter
- 3 – Cable Access
- 4 – Peripheral Cable Access Door
- 5 – Handle for Pushing
- 6 – Monitor Arm Swivel Lock
- 7 – Probe Cable Arm *
- 8 – Color Monitor

* = optional feature or accessory

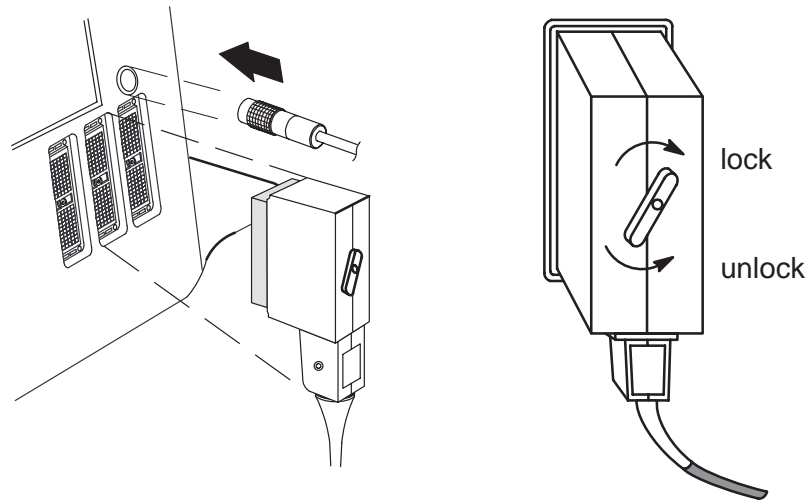
Optional Freeze/Record Foot Switch





Probe Ports

All imaging probes can be plugged into any of the three probe ports. The CWD probe port is located above the three imaging probe ports.



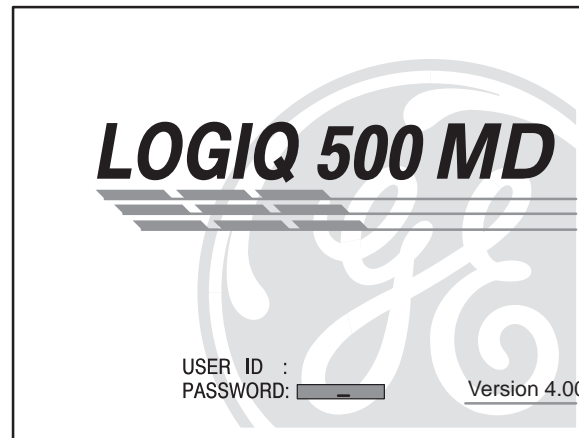
NOTE: Ensure that the probe port is deactivated before disconnecting the probe.



Password Ask

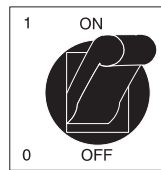
If User IDs and passwords have been established, enter a User ID and Password and press **Return** at the password ask screen. If less than eight passwords have been entered, simply press **Return** twice.

NOTE: Password Ask, User ID Numbers (1-8) and Passwords (1-8) are programmed in the Set Up System Parameters Menu page 6/6.

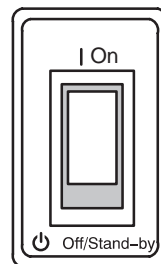




Power On



To power on the system, ensure that the Circuit Breaker, located on the back of the power supply near the bottom of the unit, is turned on.



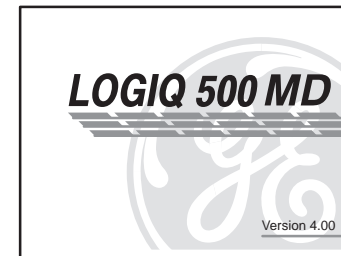
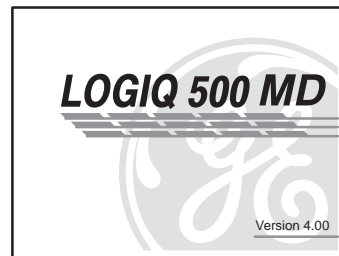
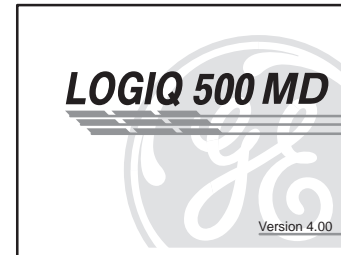
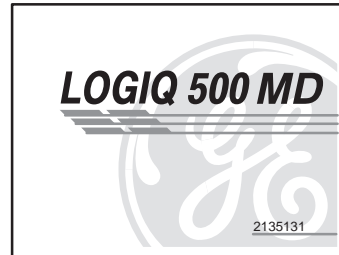
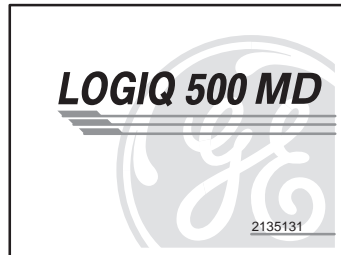
Press the Power On Power Off/Stand-by switch, located to the left of the probe connectors, to the on position.



Power On (cont'd)

During power up, the screen display changes as the system runs its self diagnostics.

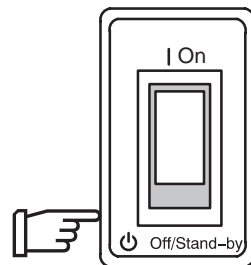
Start of
diagnostic run



End of
diagnostic run



Power Off



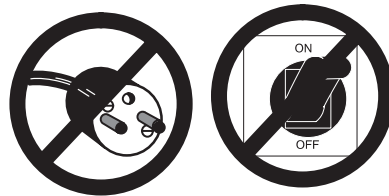
After turning the power off, the system takes a few seconds to update certain parameters to the hard drive before the power is disconnected.

NOTE: During this time the message

“Do not pull Power Cable.”

“Do not turn off Breaker.”

flashes on the monitor. The message “WARNING: NOW STARTING THE POWER OFF PROCESS.” is also displayed at the bottom of the screen.



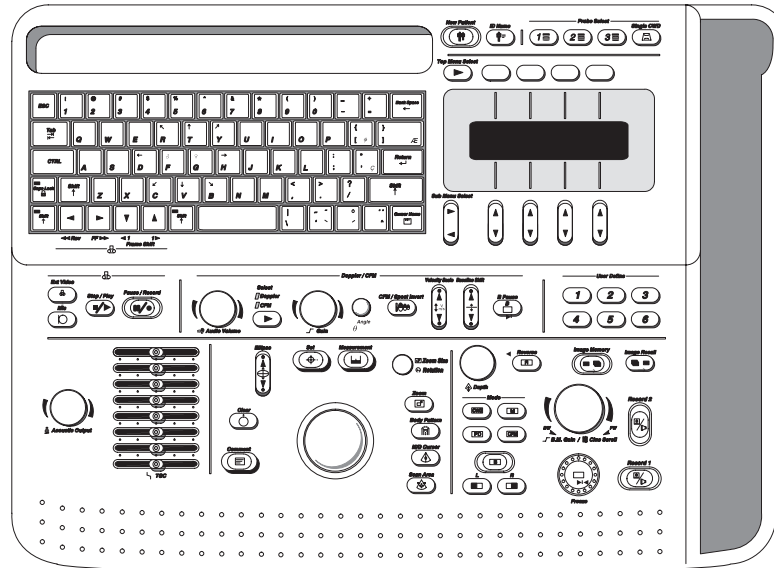
While the system is running during this power down process, do **NOT** turn off the circuit breaker in the back of the machine and do **NOT** unplug the system from the wall outlet.

If the system has not turned off five minutes after pressing the power switch off, listen for hard drive activity. If there is no hard disk drive activity, the circuit breaker on the bottom of the power supply can be used to turn off the system. Do **NOT** turn off the circuit breaker while the hard disk is working.



Keyboard

Keyboard controls have been arranged according to function and usage. This helps minimize operator movement while scanning.





Patient Information Controls

New Patient



Press the **New Patient** key at the beginning of each study to reset the system and enter new patient data.

ID/Name



Press the **ID/Name** key during a study to change patient data or exam categories.

Probe Controls

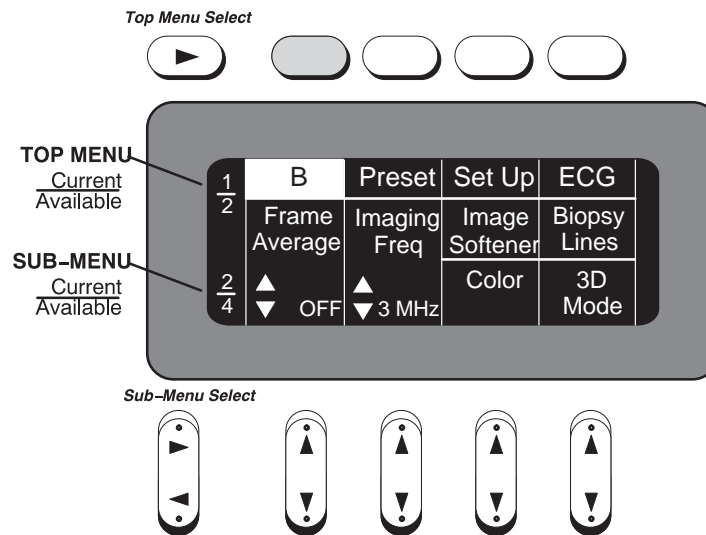
Activate a probe by pressing the key corresponding to the port to which it is attached.





Soft Menu Control Panel

The Soft Menu Display has four Top Menu selections and eight Sub Menu selections available.



The Top Menu Select key cycles through the Top Menu categories. The keys above the Top Menu are used to make the desired Top Menu selection.

The Sub-Menu Select rocker switch cycles through the available Sub Menu pages. The rocker switches below the Sub Menu selections will increase/decrease, turn on/off or change the selected parameter for that Sub Menu category.

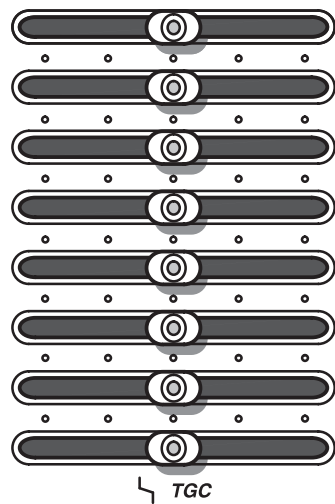


Acoustic Output and TGC



The Acoustic Output Control varies the power of the transmitted signal. It should be adjusted **As Low As Reasonably Achievable** when scanning patients (**ALARA**).

Always optimize B/M Gain before increasing Acoustic Output.



The TGC (Time Gain Compensation) controls vary the gain of the received echoes at a specific depth. These controls compensate for return signal attenuation as depth increases.



Trackball, Measurements & Annotations

The Trackball is surrounded by all of the keys that are associated with its operation.

Comment: Assigns **Trackball** to the comment cursor and displays the annotation library in the soft menu.

Clear: Used to erase comments and measurements.

Ellipse: Used to activate the ellipse function and size the active axis.

Set: Used to fix measurement cursors, select menu items or end a function.

Measurement: Displays the exam category calculation package in the soft menu and enables general measurement functions.

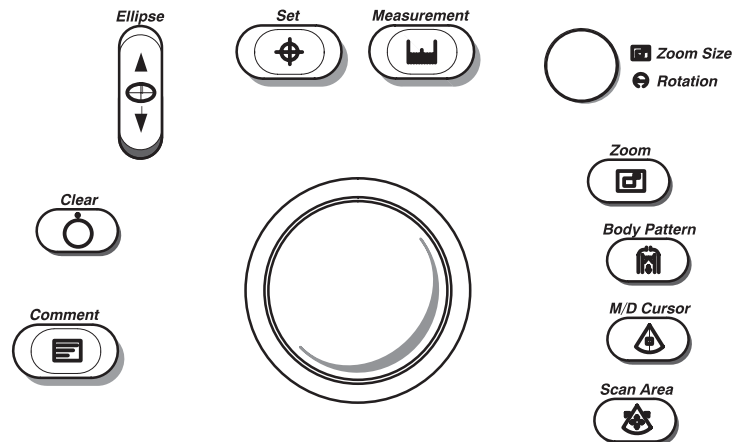
Zoom Size/Rotation: Adjust real-time zoom size and rotates body pattern probe marker.

Zoom: Enables real-time or freeze zoom function.

Body Pattern: Displays body pattern selections in the soft menu.

M/D Cursor: Assigns trackball control to M-Mode cursor, Doppler cursor or CFM window in Color Mode.

Scan Area: Used to assign trackball control to adjust size/position B-Mode sector display, CFM window, and horizontal size/position of the real-time zoom window.



Mode, Display and Record Controls

This group of controls is used most often while scanning. They control functions such as:

Mode controls: B, PD, CFM, CWD & M.

Depth: Display field of view.

Reverse: Left/right scan orientation.

Multi-Image: L/R split screen display.

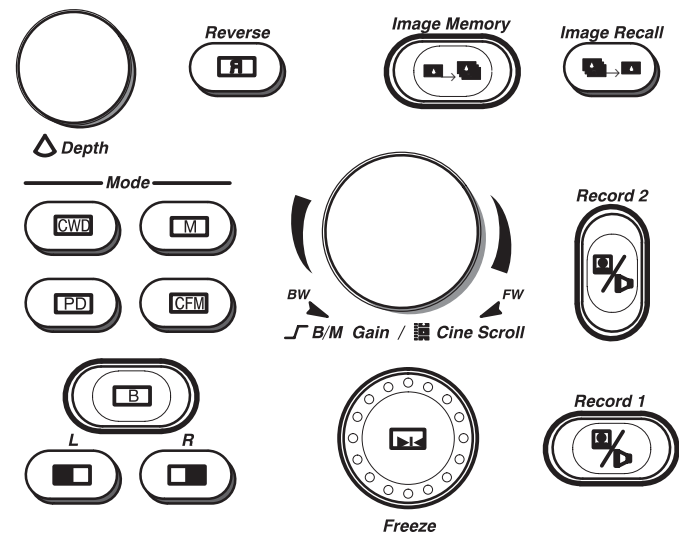
B/M Gain & Cine control: Gain control while scanning. Cine control in freeze. Refer to the *Cine Memory* section for details.

Freeze: Stops image acquisition.

Image Memory: Saves frozen image to temporary memory. Refer to the *Image Memory* section for details.

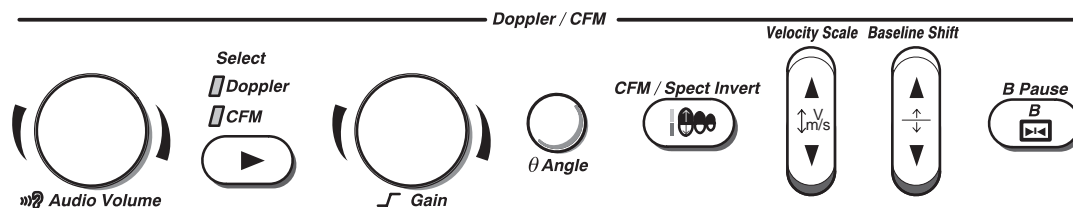
Image Recall: Displays last image saved in Image Memory and the available images in the soft menu. Refer to the *Image Memory* section for details.

Record 1 & 2: Printer/camera control.



Doppler and CFM Controls

These dual function controls affect both Doppler and Color Flow Mapping. While in Doppler with CFM the Select switch can toggle the affect of the controls between B/W Doppler and Color Flow.



Audio Volume: Used to increase or decrease Doppler audio volume output.

Select Doppler/CFM: Assign Doppler controls to adjust B/W Doppler or CFM.

Gain: Adjusted overall received echo gain for Doppler or CFM.

θ Angle: Adjusts angle correction for flow velocity calculation.

CFM/Spect Invert: Inverts Doppler spectrum or Color Flow Map assignments.

Velocity Scale: Adjusts velocity scale to accommodate faster/slower blood flow velocities.

Baseline Shift: Minimize aliasing by assigning more of the overall displayed velocity scale to forward or reverse flow. Changes Focus Position when in B-Mode.

B Pause: Freezes the B-Mode image while keeping the Doppler spectrum or M-Mode trace display active. Press to view CW Doppler.



VCR Controls

When using the approved Sony UP-9500MD VCR, these controls affect the record and playback functions of the VCR from the LOGIQ™ 500 keyboard.

When the Blue Shift key is activated, the left, right, up and down arrows on the keyboard are assigned to control the VCR playback.

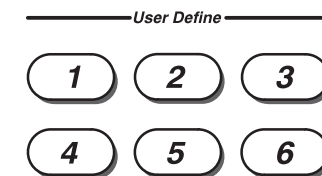
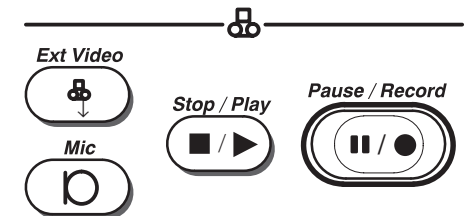
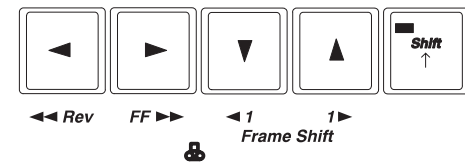
Press the **Ext Video** key to view an external video signal on the scan monitor.

Turning the Mic function on will record everything spoken in the vicinity of the console on the video tape.

*NOTE: Turn the Mic function off before pressing **Ext Video** if no audio recording is desired. This does not effect Doppler audio.*

User Define Keys

User Define keys can be programmed by the user to perform a series of keystrokes that are done repetitively. Each sequence can store 64 keystrokes including pauses for toggle functions. Refer to the *User Define Keys* section for details.





Initial Set Up

Set Up Menu Access

Hospital Name

Date/Time

System ID Number

Language Selection

Display Format

This chapter shows how to customize the LOGIQ™ 500 for patient scanning. Refer to the *Basic Scan and Customizing Your System* chapters in the LOGIQ™ 500 User Manual for more thorough explanations.

Set Up Menu Access

The system has three sets of parameters that can be preset for ease of operation and improved productivity. Under the Set Up Top Menu, SYSTEM PARAM (System Parameters) has six menu pages, PRESET PROG (Preset Program) has ten menu pages and CUSTOM DISP (Custom Display) has seventeen menu pages.

To access a menu page, select the Set Up Top Menu.

Use the Sub-Menu rocker switches to display SYSTEM PARAM, PRESET PROG or CUSTOM DISP menus.

Use the **Set** key and PRIOR/NEXT menu selections to move through the available pages.

Use the **Trackball** to select the desired parameter and change as necessary.

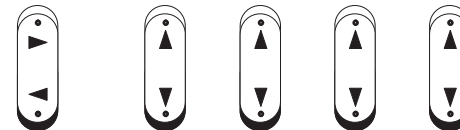
Refer to the *User Preset* section for further details.

Top Menu Select



| | | | | |
|--------|----------------|----------------|-------------|-------------|
| 1 2 | B | Preset | Set Up | ECG |
| | Custom Display | Preset Program | Save Values | User Define |
| 1 1 | System Paramtr | | Utility | Diag |

Sub-Menu Select



Hospital Name

Enter the hospital, clinic or office name on the Set Up/System Parameter page 1/6.

This hospital name appears in the upper left corner of the monitor just below the patient name.

The hospital name stays the same for all patients and exam categories until it is changed on this system parameter page.

```
01/08/97 14:28:05
GE Medical Systems C364
USER PARAM SYSTEM PARAM PRESET PROG CUSTOM DISP
PAGE : 1/6 PRIORITY NEXT CONTENTS
COMMAND : SAVE RESET DELETE EXIT

***** System Setup *****
Hospital Name: GE Medical Systems
Date Format : YY/MM/DD MM/DD/YY DD/MM/YY
Time Format : 24H 12H
Language : English French German Spanish Italian
Diag Category: Rad/Abd Obst Gyne Card Vasc Urol SalPts
Report Cursor Blink : Off On
Report Cursor Type : Underscore Block
CUR selection reset on New Patient : Off On
Insite Access Enable : Off On
Keyboard LED Bright : Dark Bright
Keyboard Menu Bright : Dark Mid1 Mid2 Bright
Keyboard Tab : Normal Hard
Operation Error Beep : Off Low Loud
Standby Time [min] : S 15 30 45 60 Inf
Power On Memory Test : Off On
Power On Status : Keep-Latest Reset
System Error Erase Interval [min] : 0.1 1 10 Inf
Display Probe Name : Off On

'TRACKBALL' and 'SET' are available.
```

Date/Time

Format

Select the format that will be used to display the date and time.

The date can be displayed as:

Year/Month/Day
Month/Day/Year
Day/Month/Year.

The time can be displayed as:

24 hour (military time)
12 hour (am/pm is hard to distinguish).

```
01/08/97 14:28:05
GE Medical Systems C364
USER PARAM SYSTEM PARAM PRESET PROG CUSTOM DISP
PAGE : 1/ 6 PRIORITY NEXT CONTENTS
COMMAND : SAVE RESET DELETE EXIT

***** System Setup *****
Hospital Name: GE Medical Systems
Date Format : YY/MM/DD MM/DD/YY DD/MM/YY
Time Format : 24H 12H
Language : English French German Spanish Italian
Diag Category: Rad/Rad Obst Gyne Card Vasc Urol SmIPts
Report Cursor Blink : Off On
Report Cursor Type : Underscore Block
CUR selection reset on New Patient : Off On
Insite Access Enable : Off On
Keyboard LED Bright : Dark Bright
Keyboard Menu Bright : Dark Mid1 Mid2 Bright
Keyboard Tab : Normal Loud
Operation Error Beep : Off Low Loud
Standby Time [min] : 5 10 15 30 45 60 Inf
Power On Memory Test : Off On
Power On Status : Keep-Latest Reset
System Error Erase Interval [min] : 0.1 1 10 Inf
Display Probe Name : Off On

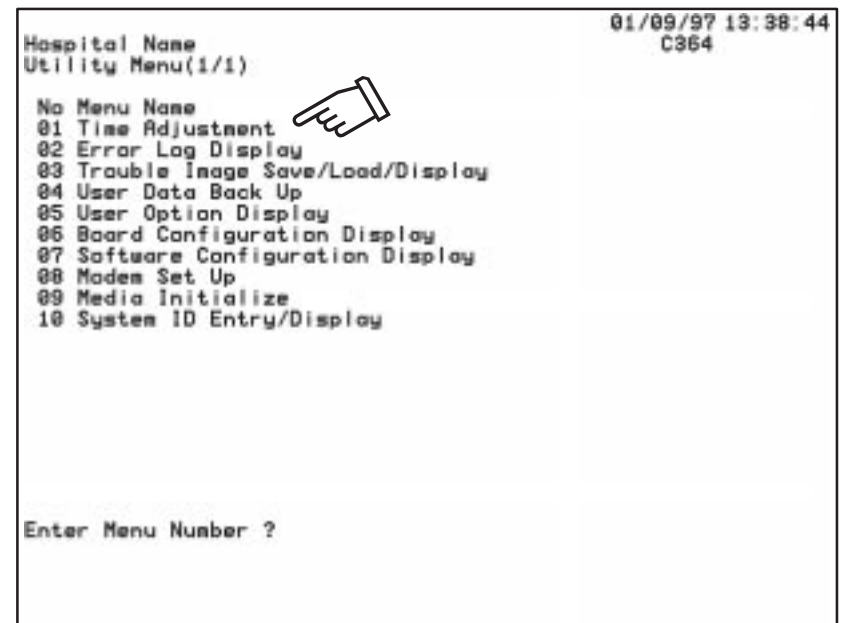
'TRACKBALL' and 'SET' are available.
```



Adjustment

To adjust the date and time, the system clock must be adjusted.

In the Set Up Top Menu, select the Utility menu. Enter number 01 (Time Adjustment) to change the time and/or date.





Adjustment (cont'd)

To Advance (add) the time, type in the number of hours and minutes to add to the currently displayed time. HH:MM is the format to use. Maximum input can only be 12:00.

To Retard (subtract) the time, type a minus sign (–) then the hours and minutes to be subtracted from the currently displayed time. –HH:MM is the format to use. Maximum input can only be –12:00.

To change the date, advance or retard the appropriate amount of time.

NOTE: The 12 hour display format has no am/pm indicator. The date will change at noon if the set time is 12 hours off.

Press the **Utility** rocker switch to exit the Utility menu.

| | |
|---|-------------------|
| Hospital Name | 01/09/97 13:39:51 |
| Time Adjustment(1/1) | C364 |
| [Caution] You can change only time within +,-12 hours | |
| Input the difference of time (HH:MM) ?_ | |

System ID Number

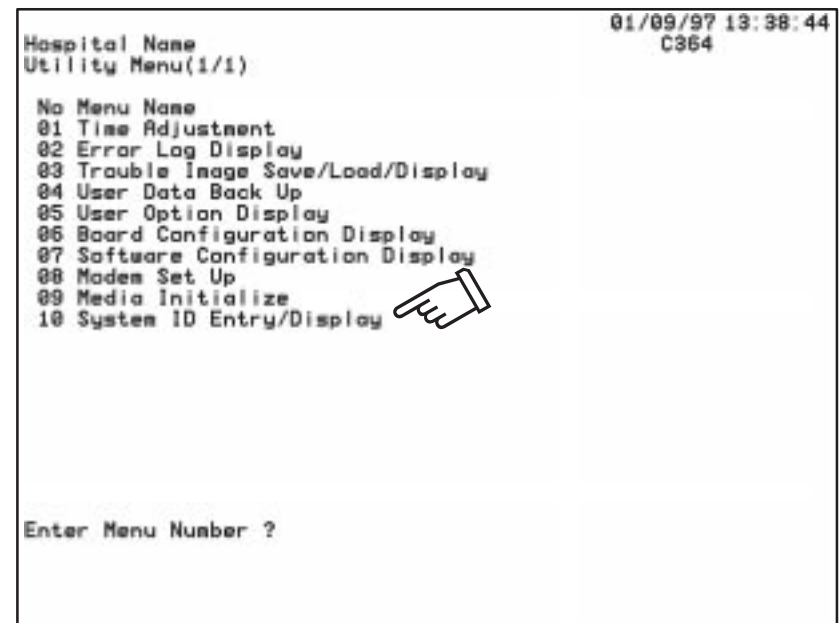
The LOGIQ™ 500 system ID number is assigned at the factory. This number is used by the system when initializing a video tape or MOD (image archive option) for image storage.

If there is more than one system at a facility, the ID numbers should be set the same. A scanner will not write to a tape or MOD if the media was initialized on a different scanner (different ID number).

A system ID number can be assigned in the range of 00000 to 16383.

To display or enter a System ID number:

1. Press the **Set Up** Top Menu key.
2. Select **Utility** from the Set Up menu.
3. Enter number **10** (System ID Entry/Display) and press **Return**.
4. Enter number **1** (ID Entry) or **2** (ID Display) and press **Return**.
5. Enter an ID number in the range of **00000–16383** and press **Return**. If the ID was displayed, make a mental note or record the number for future reference.
6. Press the **Utility** rocker switch to exit the Utility menu and return to the previous scan mode.



Language Selection

There are five different language selections to view the screen messages and displays. The language selection is located in the Set Up/System Parameters page 1/6.

Select to have the display in:

- English
- French
- German
- Spanish
- Italian.

```

01/08/97 14:20:05
GE Medical Systems C364
USER PARAM SYSTEM PARAM PRESET PROG CUSTOM DISP
PAGE : 1/ 6 PRIORITY NEXT CONTENTS
COMMAND : SAVE RESET DELETE EXIT

***** System Setup *****
Hospital Name: GE Medical Systems
Date Format : YY/MM/DD MM/DD/YY DD/MM/YY
Time Format : 24H 12H
Language : English French German Spanish Italian
Diag Category: Rad/Abd Obst Gyne Card Vasc Urol SmIPts
Report Cursor Blink : Off On
Report Cursor Type : Underscore Block
CUR selection reset on New Patient : Off On
Insite Access Enable : Off On
Keyboard LED Bright : Dark Bright
Keyboard Menu Bright : Dark Mid1 Mid2 Bright
Keyboard Tab : Normal Word
Operation Error Beep : Off Low Loud
Standby Time [min] : 5 10 15 30 45 60 Inf
Power On Memory Test : Off On
Power On Status : Keep-Latest Reset
System Error Erase Interval [min] : 0.1 1 10 Inf
Display Probe Name : Off On

'TRACKBALL' and 'SET' are available.
  
```



Display Format

A wide variety of display formats and mode combinations can be programmed to be presented on the LOGIQ™ 500. Parameters in the Set Up/Custom Display menus allow the user to turn on or off display mode combinations.

Custom Display Page 11

Timeline Format

Choose to display B-Mode and Timeline formats side/side (B-Mode on the left half and M-Mode or Doppler on the right half) or Top/Bottom (B-Mode on the top half and M-Mode or Doppler on the bottom half).

M-Mode

Turn on or off the seven M-Mode display format selections. Side/Side choices apply only if Side/Side is selected in Timeline Format. Top/Bottom choices apply only if Top/Bottom is selected in Timeline format.

The parameter M Format (Side/Side, Full) sets the default M-Mode display for full screen M-Mode.

```

01/08/97 14:58:14
C364
GE Medical Systems
USER PARAM SYSTEM PARAM PRESET PROG CUSTOM DISP
CATEGORY : OBSTETRICS PRESET NAME : 2/3 TRIMESTER
PAGE : 11/17 PRIOR NEXT CONTENTS
COMMAND : SAVE RESET DELETE EXIT

***** Imaging Parameter 11 *****
Timeline Sweep Method : Scroll Moving-Bar
Timeline Format : Side/Side Top/Bottom
Auto B Melt at Unfreeze : Off On
M Mode Simul PD Activity : Off On
M Color Auto Start : Off On
M Color Map : 1 2 3 4 5 6
M Tag Auto Start : Off On
M Tag Center [%] : 60
M Tag Width [%] : 20
M Format(Side/Side,Full) : Large Small
M Mode FULL B + Cursor : Off On
M Mode Side/Side B Large : Off On
M Mode Side/Side B Small : Off On
M Mode Top/Bottom B Large : Off On
M Mode Top/Bottom B Mid : Off On
M Mode Top/Bottom B Small : Off On
M Mode Full M : Off On
M Scale Mark : Time/Depth Time
M Video Inverse : Off On

'TRACKBALL' and 'SET' are available.

```



Timeline Sweep Method

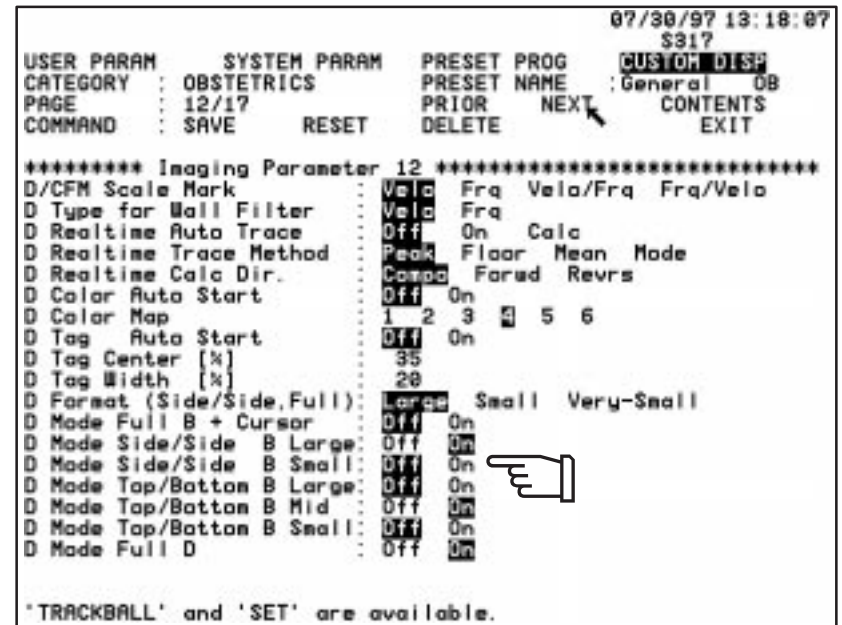
Use this parameter to select a moving bar update method for M-Mode or Doppler (image updates as a blue bar moves across the screen) or Continuous Scroll (image updates at the edge of the timeline and scrolls across the screen).

Custom Display Page 12

Doppler

Turn on or off the seven Doppler display format selections. Side/Side choices apply only if Side/Side is selected in Timeline Format. Top/Bottom choices apply only if Top/Bottom is selected in Timeline format.

The parameter D Format (Side/Side, Full) sets the default Doppler Mode display for full screen Doppler Mode.





Scanning

Patient ID Menus

Report Pages

This chapter shows the Patient Data Entry Menu and exam category measurement/calculation report pages found on the LOGIQ™ 500. Refer to the *Basic Scan* chapter in the LOGIQ™ 500 User Manual for more thorough explanations.



Patient ID Menu

The New Patient key should be pressed at the beginning of each patient study. This clears old patient data, annotations, measurements and calculations.

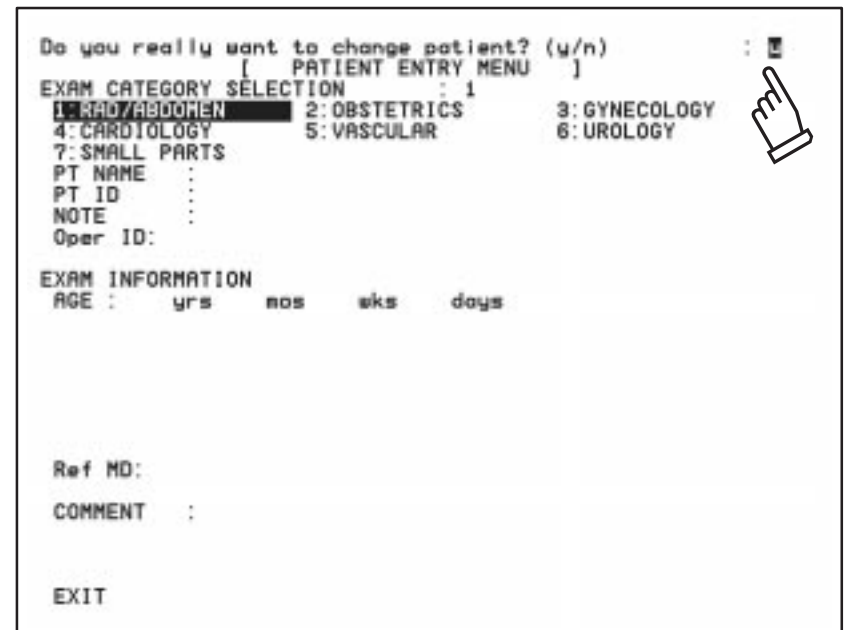
When the **New Patient** key is pressed, the Patient Entry menu appears.

If the New Patient Y/N Ask preset is set to on, the system asks:

"Do you really want to change patients? (y/n)"

This preset, found on Set Up/Preset Program page 10/10, can be a safeguard in case the New Patient key is pressed by mistake during a patient study.

This preset is exam category dependent.



```
Do you really want to change patient? (y/n) : 
[ PATIENT ENTRY MENU ]
EXAM CATEGORY SELECTION : 1
1: RAD/ABDOMEN 2: OBSTETRICS 3: GYNECOLOGY
4: CARDIOLOGY 5: VASCULAR 6: UROLOGY
7: SMALL PARTS
PT NAME :
PT ID :
NOTE :
Oper ID:

EXAM INFORMATION
AGE : yrs mos wks days

Ref MD:
COMMENT :

EXIT
```

Patient ID Menu (cont'd)

For a new patient entry, choose the appropriate exam category for the study to be accomplished.

Use the **Trackball** to move the highlight cursor to the Exam Category Selection line.

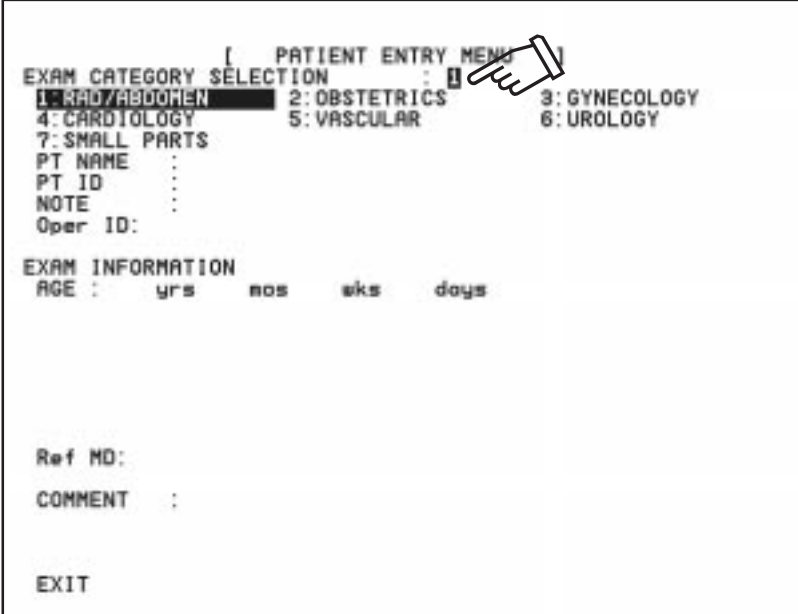
Ensure that the Blue Shift key is not active.

Enter the desired exam number.

This selection sets up all system parameters for a particular type of exam.

Choose from:

1. RAD/ABDOMEN
2. OBSTETRICS
3. GYNECOLOGY
4. RADIOLOGY
5. VASCULAR
6. UROLOGY
7. SMALL PARTS



The screenshot displays a terminal window titled "PATIENT ENTRY MENU". The "EXAM CATEGORY SELECTION" section lists seven options: 1: RAD/ABDOMEN (highlighted with a black bar and a hand icon), 2: OBSTETRICS, 3: GYNECOLOGY, 4: RADIOLOGY, 5: VASCULAR, 6: UROLOGY, and 7: SMALL PARTS. Below this are fields for "PT NAME", "PT ID", "NOTE", and "Oper ID". The "EXAM INFORMATION" section includes "AGE" with sub-labels "yrs", "mos", "wks", and "days". At the bottom, there are fields for "Ref MD:", "COMMENT:", and "EXIT".

```

[ PATIENT ENTRY MENU ]
EXAM CATEGORY SELECTION : 1
1: RAD/ABDOMEN          2: OBSTETRICS          3: GYNECOLOGY
4: RADIOLOGY           5: VASCULAR           6: UROLOGY
7: SMALL PARTS
PT NAME :
PT ID   :
NOTE    :
Oper ID:

EXAM INFORMATION
AGE :   yrs   mos   wks   days

Ref MD:
COMMENT :

EXIT
```



Patient ID Menu (cont'd)

Enter the patient's name, ID number and notes that may apply to the study.


The patient name and patient ID will appear on the image screen. All other information is automatically entered into appropriate exam report pages.

The Tech ID line is optional. It may be used to identify who performed the study.

```
[ PATIENT ENTRY MENU ]
EXAM CATEGORY SELECTION : 2
1: RAD/ABDOMEN      2: OBSTETRICS      3: GYNECOLOGY
4: CARDIOLOGY      5: VASCULAR        6: UROLOGY
7: SMALL PARTS
PT NAME :
PT ID :
NOTE :
Oper ID:

EXAM INFORMATION
AGE : yrs
PREGNANCY ORIGIN DATA SELECTION :
(1:LMP 2:BBT 3:EDC 4:GA)
LMP :
BBT :
EDC :
GA :
GRAVIDA : PARA : AB : ECTOPIC :
Ref MD: FETUS NUMBER :
COMMENT :

EXIT
```



Patient ID Menu (cont'd)

The exam information to be filled in depends on the exam category selected. The example to the right is for the Obstetrics category. (The BBT selection does not appear in the USA OB format.)

Other typical exam information may be:

AGE : __yrs __mos __wks __days
 HEIGHT: __cm __in __ft __in
 WEIGHT: __.__kg __lbs
 BSA : __. __m²
 SEX : __

The unit prompts for age, height and weight can be turned on/off in Set Up/Preset Program page 10/10.


These preset parameters are exam category dependent.

```

[ PATIENT ENTRY MENU ]
EXAM CATEGORY SELECTION : 2
1: RAD/ABDOMEN      2: OBSTETRICS      3: GYNECOLOGY
4: CARDIOLOGY       5: VASCULAR          6: UROLOGY
7: SMALL PARTS
PT NAME :
PT ID :
NOTE :
Oper ID:

EXAM INFORMATION
AGE : yrs
PREGNANCY ORIGIN DATA SELECTION
(1:LMP 2:BBT 3:EDC 4:GA)
LMP
BBT
EDC
GA
GRAVIDA : PARA : AB : ECTOPIC :
Ref MD: FETUS NUMBER :
COMMENT :

EXIT
    
```





Patient ID Menu (cont'd)

The Ref MD can be added to note the referring physician.

The two lines in the comment field will hold 50 characters. These comments are not the same as the comment field found on the measurement/calculation report pages.

Highlight EXIT and press **Return** or press the **New Patient** key when the patient entry menu data has been completed.


The system will take a few seconds to load new exam category parameters and calibrate the attached transducers before returning to the scan mode.

```
[ PATIENT ENTRY MENU ]
EXAM CATEGORY SELECTION : 1
1: RAD/ABDOMEN          2: OBSTETRICS          3: GYNECOLOGY
4: CARDIOLOGY           5: VASCULAR            6: UROLOGY
7: SMALL PARTS
PT NAME :
PT ID   :
NOTE    :
Oper ID:

EXAM INFORMATION
AGE :   yrs   mos   wks   days

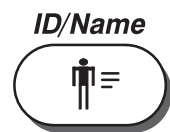
Ref MD:
COMMENT :

EXIT
```





Patient ID Menu (cont'd)



If the patient information or exam category needs to be changed during a study, use the ID/Name key.

When the changes have been completed, highlight EXIT and press **Return** or press the **ID/Name** key again to return to the scan mode.



Report Pages

Vascular Report Page

The Vascular Report Page comes with the optional Vascular Calculations software.

| | | |
|-------------------|----------|----------|
| HOSPITAL NAME | Oper ID: | 01/29/97 |
| ID: | NAME: | AGE: |
| SEX: HEIGHT: | WEIGHT: | BSA: |
| Ref MD: | NOTE: | |
| MEASUREMENTS | AVE | 1 2 3 |
| Left ICA | (|) |
| Left ECA | (|) |
| Left BIFURC | (|) |
| Left CCA | (|) |
| Left ICA/CCA | (|) |
| Right ICA | (|) |
| Right ECA | (|) |
| Right BIFURC | (|) |
| Right CCA | (|) |
| Right ICA/CCA | (|) |
| CALCULATIONS | | |
| S/D Ratio | (|) |
| A/B Ratio | (|) |
| % Stenosis | (|) |
| Pulsatility Index | (|) |
| Resistivity Index | (|) |
| COMMENTS: | | |



GYN Report Page

The GYN Report Page comes with the standard GYN calculation software.

| | | | |
|-----------------------|-------|-------------|----------|
| HOSPITAL NAME | | Oper ID: | 01/29/97 |
| ID: | NAME: | | AGE: |
| LMP: | | G0 P0 A0 E0 | |
| Ref MD: | NOTE: | | |
| MEASUREMENTS | LAST | 1 | 2 3 |
| Uterus Length | (|) |) |
| Uterus Width | (|) |) |
| Uterus Height | (|) |) |
| Right Ovary Length | (|) |) |
| Right Ovary Width | (|) |) |
| Right Ovary Height | (|) |) |
| Left Ovary Length | (|) |) |
| Left Ovary Width | (|) |) |
| Left Ovary Height | (|) |) |
| Endometrium Thickness | (|) |) |
| CALCULATIONS | LAST | 1 | 2 3 |
| Uterus RI | | | |
| Right Ovary RI | | | |
| Left Ovary RI | | | |
| COMMENTS: | | | |



OB Report Pages

The OB Report Pages come with the optional OB Calculations software. There are two report pages for each of the four different OB calculation formats. The first report page is different for all four formats. The second report page is different for USA, but the European, Tokyo University and Osaka University formats share the same second report page.

Gestational Age Error Marker

Whenever three or more gestational age measurements are included in the Composite Gestational Age (CGA)/Composite Ultrasound Age (CUA) calculation, an arrow may appear on the report page to mark the gestational age which is farthest from the CGA/CUA. This arrow is immediately to the right of the GA display. If two or more gestational age estimates are equal and the farthest from the CGA/CUA, the error marker will not be displayed.

OB Report Format

The OB Report Format selection is located in the Set Up/System Parameters page 2/6.

Choose to display "OB Report Format" as:

Tokyo University
Osaka University
USA
European.

USA Format – Page 1

The report page shown is the first page available when USA OB Report Format is selected in Set Up System Parameters page 2/6.

| | | | | | | | | |
|---------------|-------------|------------|-------------|----------|---|-----|-----|----|
| Hospital Name | | Oper ID: | | 09/16/97 | | | | |
| ID: | NAME: | AGE: 0 | | | | | | |
| LMP (OPE) | GA (LMP) | EDD (LMP) | G0 P0 A0 E0 | | | | | |
| Ref MD: | NOTE: | | | | | | | |
| POS: | PLAC: | ← 1/2 | | | | | | |
| MEASUREMENTS | CUA | AVE | 1 | 2 | 3 | AGE | SD | GP |
| BPD (HADLOCK) | y | (| | | |) | | |
| HC (HADLOCK) | y | (| | | |) | | |
| OFD (HC) | | (| | | |) | | |
| AC (HADLOCK) | y | (| | | |) | | |
| FL (HADLOCK) | y | (| | | |) | | |
| CRL (HADLOCK) | y | (| | | |) | | |
| GS (HELLMAN) | y | (| | | |) | | |
| | | | | | | | | |
| CALCULATIONS | | | | | | | | |
| CI | (70-86) | EFW | g± | g | (| lb | oz) |) |
| FL/BPD | (71-87) | Based On: | (| | | | | |
| FL/AC | (20-24) | AFI (cm) | | | | | | |
| FL/HC | (??-??-??) | LMP: (OPE) | | | | | | |
| HC/AC | (?.??-?.??) | AGE: LMP | | | | CUA | | |
| | | EDD: LMP | | | | CUA | | |
| COMMENTS: | | | | | | | | |

OB Report Page 1 – USA Format

USA Format – Page 2

The report page shown is the second page available when USA OB Report Format is selected in Set Up System Parameters page 2/6.

| | | | | | |
|---------------|-----------|----------|---------------|----------|-------------|
| Hospital Name | | | | Oper ID: | 09/16/97 |
| ID: | NAME: | | | AGE: | 0 |
| LMP(OPE) | GA(LMP) | EDD(LMP) | G0 P0 A0 E0 | | |
| Ref MD: | POS: | NOTE: | + 2/2 | | |
| | FLUID: | PLAC: | PREVIA?: | GRADE: | |
| BIOPHYSICAL: | MOVEMENT: | TONE: | BREATHING: | SCORE: | /10 |
| | FLUID: | | REACTIVE NST: | | |
| AFI(cm) | SUM = | 1 + | 2 + | 3 + | 4 COMMENTS: |
| | SITE | AVE | 1 | 2 | 3 |
| HR(BPM) | | | (| |) |
| PI | 1 | | (| |) |
| | 2 | | (| |) |
| | 3 | | (| |) |
| RI | 1 | | (| |) |
| | 2 | | (| |) |
| | 3 | | (| |) |
| S/D | 1 | | (| |) |
| | 2 | | (| |) |
| | 3 | | (| |) |
| A/B | 1 | | (| |) |
| | 2 | | (| |) |
| | 3 | | (| |) |
| COMMENTS: | | | | | |

OB Report Page 2 – USA Format

European Format – Page 1

The report page shown is the first page available when European OB Report Format is selected in Set Up System Parameters page 2/6.

The report page shown on Scanning 14 is the second report page which is available when European Format is selected.

| | | | | | |
|--------------------|--------|-------------|----------|---|---|
| Hospital Name | | Oper ID: | 01/09/97 | | |
| ID: | NAME: | | AGE: 0 | | |
| LMP: 09/01/96 | BBT: | 00 P0 A0 E0 | | | |
| Ref MD: | NOTE: | | | | |
| | | | - 1/2 | | |
| MEASUREMENTS | AGE | CGA | 1 | 2 | 3 |
| GS (TOKYO) | | U | | | |
| CRL (JEANTY) | | U | | | |
| BPD (JEANTY) | | U | | | |
| HC (JEANTY) | | U | | | |
| FL (JEANTY) | | U | | | |
| TAD (ERIKSEN) | | U | | | |
| AC (JEANTY) | | U | | | |
| BD (JEANTY) | | U | | | |
| OFD (HANSMANN) | | U | | | |
| Ft (PARIS) | | U | | | |
| CALCULATIONS | | | | | |
| GA (LMP) 18W4D | CI | HR | | | |
| EDD (LMP) 06/08/97 | FL/BPD | | 1 | 2 | 3 |
| LMP (GA) | FL/AC | P1 | | | |
| CGA | HC/AC | R1 | | | |
| EDD (CGA) | FL/Ft | D/S | | | |
| EFW (Shep/Wars) | BD/BPD | | | | |
| COMMENTS: | | | | | |

OB Report Page 1 – European Format



European, Tokyo University and Osaka University Format – Page 2

The report page shown is the second page available when either European, Tokyo University or Osaka University OB Report Format is selected in Set Up System Parameters page 2/6.

| | | | | | | |
|---------------|-------|-----------|--------|----------------------|---------------|------------|
| Hospital Name | | Oper ID: | | 01/09/97 | | |
| ID: | NAME: | EDC(LMP): | | 06/08/97 00 P0 A0 E0 | | |
| LMP: 09/01/96 | BBT: | NOTE: | | | | |
| Ref MD: | | | | | - 2/2 | |
| BIOPHYSICAL: | | MOVEMENT: | FLUID: | TONE: | BREATHING: | SCORE: /10 |
| | | | | | REACTIVE NST: | |
| | SITE | LAST | 1 | 2 | 3 | COMMENTS: |
| HR(BPM) | | | (| |) | |
| PI | 1 | | (| |) | |
| | 2 | | (| |) | |
| | 3 | | (| |) | |
| RI | 1 | | (| |) | |
| | 2 | | (| |) | |
| | 3 | | (| |) | |
| S/D | 1 | | (| |) | |
| | 2 | | (| |) | |
| | 3 | | (| |) | |
| A/B | 1 | | (| |) | |
| | 2 | | (| |) | |
| | 3 | | (| |) | |
| COMMENTS: | | | | | | |

OB Report Page 2 – European, Tokyo University and Osaka University Formats

Tokyo University Format – Page 1

The report page shown is the only one available when Tokyo University OB Report Format is selected in Set Up System Parameters page 2/6.

The report page shown on Scanning 14 is the second report page which is available when Tokyo University Format is selected.

| Hospital Name | Oper ID: | 01/09/97 |
|--------------------|--------------------------------|---------------|
| ID: | NAME: | AGE: 0 |
| LMP: 09/01/96 BBT: | EDC(LMP): 06/08/97 G0 P0 A0 E0 | |
| Ref MD: | NOTE: | |
| MEASUREMENTS | GA | EDC CGA 1 2 3 |
| GS(TOKYO) | | u () |
| CRL(TOKYO) | | u () |
| BPD(TOKYO) | | u () |
| FL(TOKYO) | | u () |
| LV(TOKYO) | | u () |
| APTD(TOKYO) | | () |
| TTD(TOKYO) | | () |
| CALCULATIONS | | |
| GA(LMP) 18W4D | CTAR | HR |
| EDC(LMP) 06/08/97 | EDD | 1 2 3 |
| CGA | EF | PI |
| EDC(CGA) | FS | RI |
| EFB(TOKYO) | Vmax | S/D |
| | PLI | |
| COMMENTS: | | |

OB Report Page 1 – Tokyo Univeristy Format

**Osaka University Format –
Page 1**

The report page shown is the only one available when Osaka University OB Report Format is selected in Set Up System Parameters page 2/6.

The report page shown on Scanning 14 is the second report page which is available when Osaka University Format is selected.

| | | | | | | |
|-------------------|-----------------|--------------------|-----|----------|----|---------|
| Hospital Name | | Oper ID: | | 01/09/97 | | |
| ID: | NAME: | | | AGE: 0 | | |
| LMP: 09/01/96 | BBT: | EDC(LMP): 06/08/97 | | G0 | P0 | A0 E0 |
| Ref MD: | NOTE: | | | | | |
| MEASUREMENTS | GA | EDC | CGA | 1 | 2 | - 1/2 3 |
| CRL (OSAKA) | | | u (| | |) |
| BPD (OSAKA) | | | u (| | |) |
| FTA (OSAKA) | | | u (| | |) |
| HL (OSAKA) | | | u (| | |) |
| FL (OSAKA) | | | u (| | |) |
| | | | | | | |
| CALCULATIONS | | | | | | |
| GA(LMP) 18W4D | CTAR | | HR | | | |
| EDC(LMP) 06/08/97 | EDD | | 1 | 2 | 3 | |
| CGA | EF | | PI | | | |
| EDC (CGA) | FS | | RI | | | |
| GA (EFBW) | Vmax | | S/D | | | |
| GA (IUGR) | PLI | | | | | |
| EFBW (OSAKA) | IU-EFBW (OSAKA) | | | | | |
| COMMENTS: | | | | | | |

OB Report Page 1 – Osaka University Format



Cardiology Report Pages

This report page is an example of one of many Cardiology Report pages available with the optional cardiac calculation packages.

| | | | | | |
|----------------------|---------|----------|----------|---|---|
| HOSPITAL NAME | | Oper ID: | 01/29/97 | | |
| ID: | | NAME: | AGE: | | |
| SEX: | HEIGHT: | WEIGHT: | BSA: | | |
| Ref MD: | | NOTE: | | | |
| METHOD: Teichholz | | | | | |
| MEASUREMENTS | LAST | | 1 | 2 | 3 |
| LVIDd | | | (| |) |
| LVIDs | | | (| |) |
| IVSd | | | (| |) |
| IVSs | | | (| |) |
| LVPWd | | | (| |) |
| LVPWs | | | (| |) |
| CALCULATIONS | | | | | |
| HR | | | | | |
| EdV | | | | | |
| EsV | | | | | |
| SV | | | | | |
| CO | | | | | |
| EF | | | | | |
| FS | | | | | |
| CHANGE METHOD | | | | | |
| COMMENTS: | | | | | |



This page left blank intentionally.



Image Memory

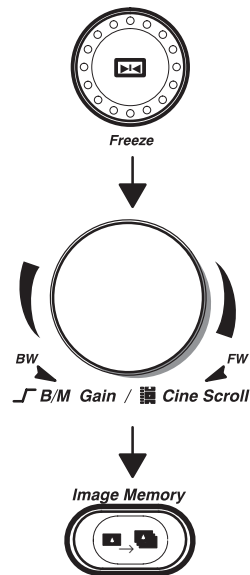
Memory Storage
Storage Display
Memory Recall

This chapter shows how to save and recall images in the temporary memory of the LOGIQ™ 500. Refer to the *Basic Scan* chapter in the LOGIQ™ 500 User Manual for more thorough explanations.



Memory Storage

The LOGIQ™ 500 has storage space in RAM (Random Access Memory) for eight archived images. This storage is temporary. It is erased when the New Patient key is pressed or power is turned off.



Press the **Freeze** key to stop image acquisition.

The Cine Scroll function can be used to display the desired image on the monitor. Using the scroll function will erase any measurements/calculations made.

Press **Image Memory** to save the displayed image in the next available memory location.



Storage Display

Images stored in system memory can be recalled for review or archival.

The Soft Menu contains the display mode and time the images were stored.

| B 08:48 | BM 08:51 | BD 08:54 | B 08:58 |
|--------------|---------------|---------------|----------------|
| C,B 08:50 | C,BM 08:53 | C,BD 08:57 | C,B/B 08:59 |

Memory Recall

Image Recall



To recall images stored in system memory:

1. Press the **Image Recall** key. The Image Recall Sub-Menu is displayed on the Soft Menu display.
2. The last image to be placed into Image Memory is displayed.
3. Use the appropriate Sub-Menu rocker switch to select the desired image to recall.

After the recalled image is displayed, no image post processing can be performed. Only Comment, Measurement, Body Pattern, Clear, Ext Video and Mic functions are available.



This page left blank intentionally.



Cine Memory

Cine Storage
Cine Image Display
Cine Loop Review
Exit Cine

This chapter shows how to use the Cine memory capabilities of the LOGIQ™ 500. Refer to the *Basic Scan* chapter in the LOGIQ™ 500 User Manual for more thorough explanations.



Cine Storage

The LOGIQ™ 500 has storage space for several seconds of previous image frames. An extended cine memory option is available that provides five times the amount of storage compared to the standard cine memory. This storage is always active while acquiring images during scanning.

Cine Memory

Cine memory is erased when changing the following:

- New Patient
- Unfreezing
- Power is turned off
- Probe
- Scan mode
- Depth
- Display format (zoom, dual, rotate)
- Timeline sweep speed (D/M-Modes)
- Changing the PWD velocity scale (spectrum only)
- Changing the Color Flow Velocity Scale.

Cine Functionality

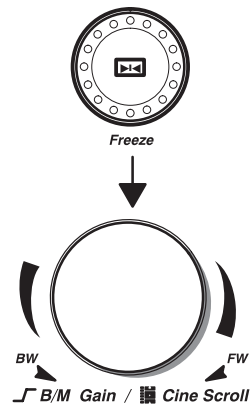
Post Processing functions can be performed while in cine such as:

- Measurements and calculations
- Color Baseline Shift
- B Color
- Color Flow Velocity Tag
- Color Flow Display Threshold
- CFM Spectrum Invert
- Zoom
- Rejection
- Gray Scale Maps
- Edit annotations.



Cine Image Display

To display cine images:



Press the **Freeze** key to stop image acquisition.

The Cine Scroll function is used to display the desired image on the monitor. The B/M Gain / Cine Scroll knob allows for displaying cine memory frame by frame.

NOTE: One click of the Cine Scroll knob erases displayed measurements.

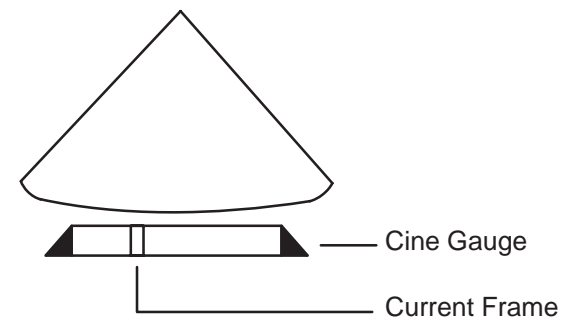


Cine Image Display (cont'd)

To display the cine gauge:

Set the "Cine Gauge Auto Display" parameter on Set Up/ Custom Display page 9/17 to ON. This automatically displays the cine gauge when the cine scroll function is used.


Setting "Cine Gauge Auto Display" to OFF will not display the Cine gauge while reviewing cine images unless it is turned on in the cine soft menu.



Cine Loop Review

To create a Cine Loop:

1. Press **Freeze**.
2. Rotate the **Cine Scroll** knob to the desired starting position on the cine gauge.
3. Press **START FRAME** on the Cine Sub-Menu.

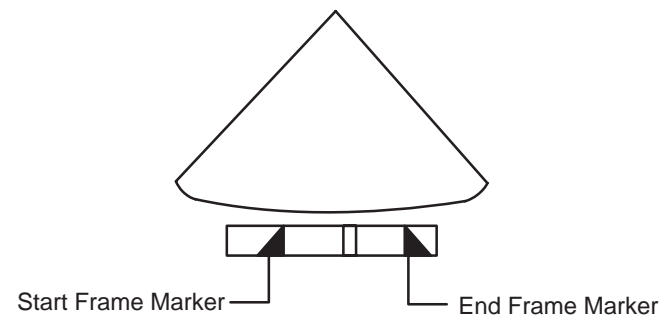
| | | | CINE |
|-------------|-------------|---|-------------|
| Start Frame | Review Loop | Loop Speed | Side Change |
| End Frame | Multpl CINE |  1/1 | CINE Gauge |



Cine Loop Review (cont'd)


4. Rotate the **Cine Scroll** knob to the desired ending position on the cine gauge.
5. Press **END FRAME**
6. Press **REVIEW LOOP**. Cine Review Loop playback begins at the selected speed.

The Review Loop function is not available for Doppler spectrum or M-Mode.



To adjust loop playback speed:

Press the top of the **LOOP SPEED** rocker switch to increase playback speed. Press the bottom of the **LOOP SPEED** rocker switch to slow down playback speed.

| | | | |
|-------------|-------------|--|-------------|
| | | | CINE |
| Start Frame | Review Loop | Loop Speed | Side Change |
| End Frame | Multpl CINE |  1/1 | CINE Gauge |



Cine Loop Review (cont'd)

The Multipl Cine Soft Menu selection is used in Dual B-Mode Cine Operation. With Multipl Cine on (menu highlighted), Cine review of the two B-Mode images can be done simultaneously. With Multipl Cine off, Cine review is done separately using the **L/R** keys to designate the active Cine image.

| | | | CINE |
|-------------|--------------|------------|-------------|
| Start Frame | Review Loop | Loop Speed | Side Change |
| End Frame | Multipl CINE | ◆◆ 1/1 | CINE Gauge |

The Side Change menu selection is used with B/M (D)-Mode imaging. It is used to toggle between B image Cine scroll and Timeline (M/D) Cine scroll.

| | | | CINE |
|-------------|--------------|------------|-------------|
| Start Frame | Review Loop | Loop Speed | Side Change |
| End Frame | Multipl CINE | ◆◆ 1/1 | CINE Gauge |

Exit Cine

To exit Cine, press **Freeze**.



User Define Keys

Purpose
Programming
Special Keystrokes
Lock/Unlock
Deleting

This chapter explains how to use the User Define key capabilities of the LOGIQ™ 500. Refer to the *Customizing Your System* chapter in the LOGIQ™ 500 User Manual for more thorough explanations.

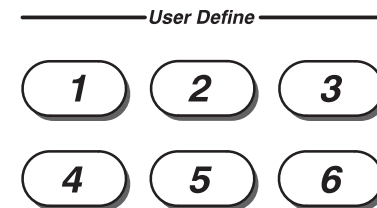


Purpose

To improve productivity, a sequence of keystrokes can be recorded and programmed to run when a single User Define key is pressed.

A keystroke is considered to be a press of a key, one movement of a knob or movement of the Trackball.

Each of the six User Define Keys can be programmed to duplicate a sequence of up to 64 keystrokes.



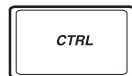
Programming

- Access the User Define function by pressing the **Set Up** Top Menu Select key.
- Select User Define from the Set Up Sub-Menu.
- Perform the keystroke or sequence of keystrokes to be programmed.
- When complete, press the desired User Define Key number to record the programming.
- The system asks: "Save data? 'Y' or 'N'." Press 'Y' on the keyboard to save the user define sequence. Press 'N' to cancel the user define programming function.

The next time a programmed User Define Key is pressed, the recorded keystroke or keystroke sequence will be performed by a single key operation.



Special Keystrokes



Ctrl. 1

If selecting Set Up Top Menu with Custom Display, System Parameter or Preset Program as part of the User Define Sequence, press **Ctrl** and **1** simultaneously to set the sub-menu page to one.

Press **Set** the appropriate number of times to ensure proper movement to the desired sub-menu page.



Blue Shift. S

Enable the **Blue Shift** key and press **S** to add a pause in the User Define Key programming sequence.

With a pause in the user define sequence, the first time the User Define Key is pressed, all steps will be executed up to the pause. The next time the key is pressed, all steps will be executed from the pause to the end (or next pause). This is especially useful in programming switching functions.



Lock/Unlock

Parameters on the Set Up/System Parameters menu page 3/6 allow the user to lock a User Define key, keeping it from being deleted or reprogrammed.

```
GE Medical Systems                                01/08/97 14:20:27
USER PARAM          SYSTEM PARAM          PRESET PROG          CUSTOM DISP
PAGE      : 3/ 6          PRIOR      NEXT      CONTENTS
COMMAND   : SAVE      RESET      DELETE      EXIT

***** System Setup *****
User Define Key No.1 : Unlock Lock
User Define Key No.2 : Unlock Lock
User Define Key No.3 : Unlock Lock
User Define Key No.4 : Unlock Lock
User Define Key No.5 : Unlock Lock
User Define Key No.6 : Unlock Lock

'TRACKBALL' and 'SET' are available.
```



Deleting

To delete a User Define Key sequence:

- Ensure that the User Define Key to be deleted is unlocked.
- Select **Set Up** Top Menu.
- Select User Define function.
- Press the User Define Key number to be deleted.
- Press 'Y' (for Yes) to overwrite current data.

A User Define Key can also be re-programmed by writing over (replacing) the existing sequence with a new series of keystrokes.



This page left blank intentionally.



Image Annotation

Overview
Special Keys
Comment Presets
Language Symbols
Annotation Library
Editing Annotations

This chapter explains how to use the annotation or comment capabilities of the LOGIQ™ 500. Refer to the *Basic Scan and Customizing Your System* chapters in the LOGIQ™ 500 User Manual for more thorough explanations.

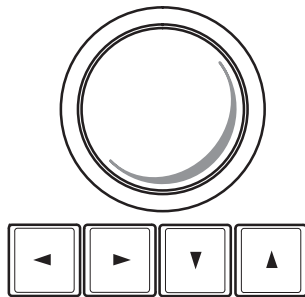


Overview

The annotation keyboard is always active. Upon power up or starting a new patient, the underscore cursor appears in the mode's home position. Comments may be typed in at the non-blinking cursor.



Pressing the **Comment** key assigns the trackball function to controlling the cursor and displays the annotation library in the Soft Key menu.



The Trackball and Keyboard Arrow keys are used to move the cursor to the desired position on the image.

When the blinking cursor is in the desired position, comments may be typed in or a selection can be made from the annotation library.

Annotations are entered in the type-over, not insert, mode. Be careful not to write over text when editing.



Special Keys

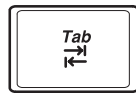


Cursor Home: Established in Set Up/Preset Program page 1/10, it returns the cursor to the upper left part of the screen or to the user specified position.

Changing the cursor position in Set Up/Preset Program page 1/10 only affects User Presets (not factory presets).

Cursor Home is EC (Exam Category) dependent.

Ctrl M permanently change the cursor home “H”/“V” (Horizontal/Vertical) settings in the Preset Program for factory and user presets.



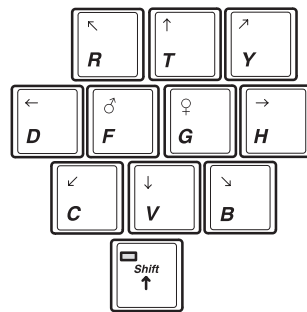
Tab: Moves the cursor to the right every eight characters or to the next word depending on the preset parameter.



Shift and Tab: Moves the cursor in the same manner but to the left.



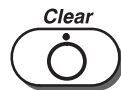
Special Keys (cont'd)



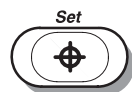
Blue Shift: Some special annotation symbols can be used by activating the Blue Shift key.

Activating Blue Shift causes the arrow, female and male symbols to be printed on the screen during the comment function when the keys shown are pressed.

The Blue Shift key acts as a lock function (similar to Caps Lock key). Press again to exit the Blue Shift function.



Clear: The function of the Clear key depends on the settings of preset parameters and activated functions. Pressing **Clear** once will erase measurements only or measurements with comments, depending on the preset "Measurement Clear Operation" on Set Up/Preset Program page 3/10. Pressing **Clear** a second time will erase the Doppler or M-Mode cursor and comments (if the Comment function is active).



Set: Used to end the Comment/Library function.

Comment Presets

Four presets on Set Up/Preset Program page 1/10 affect comment operation.

“Comment Erase at Display Change” will or will not erase all comments when a change is made in scan mode.

“Comment Clear Key Function” erases all comments with the Clear key or just the line of comments the cursor is on.

“Comment Home Position Horizontal” and “Comment Home Position Vertical” set a point on the horizontal and vertical axis for the comment cursor home position.

“Trackball Function at Freeze” could be set to assign the Trackball to the comment function when the Freeze key is pressed to stop image acquisition.





Comment Presets (cont'd)

Set the comment cursor movement desired when using the **Tab** key.

Normal = Eight character spaces.
Word = Next word (after a space).

```
01/08/97 14:28:05
GE Medical Systems C364
USER PARAM SYSTEM PARAM PRESET PROG CUSTOM DISP
PAGE : 1/ 6 PRIOR NEXT CONTENTS
COMMAND : SAVE RESET DELETE EXIT

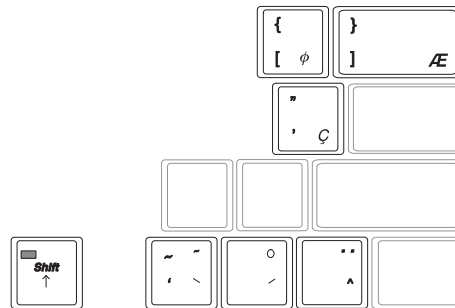
***** System Setup *****
Hospital Name: GE Medical Systems
Date Format : YY/MM/DD MM/DD/YY DD/MM/YY
Time Format : 24H 12H
Language : English French German Spanish Italian
Diag Category: Rad/Abd Obst Gyne Card Vasc Urol SmIPts
Report Cursor Blink : Off On
Report Cursor Type : Underscore Block
CUR selection reset on New Patient : Off On
Insite Access Enable : Off On
Keyboard LED Bright : Dark Bright
Keyboard Menu Bright : Dark Mid1 Mid2 Bright
Keyboard Tab : Normal Word
Operation Error Beep : Off Low Loud
Standby Time [min] : 5 10 15 30 45 60 Inf
Power On Memory Test : Off On
Power On Status : Keep-Latest Reset
System Error Erase Interval [min] : 0.1 1 10 Inf
Display Probe Name : Off On

'TRACKBALL' and 'SET' are available.
```



Language Symbols

The **Red Shift** key enables the special symbols shown in red on the keyboard.



The red symbols shown in the lower right portion of a key print when the **Red Shift** is active and that key is pressed.

The red symbols shown in the upper half of a key will print if the normal shift key and the appropriate key are pressed while the **Red Shift** is active.

Red symbols can be used in any language but can only be used with the proper designated letters.

The Red Shift key acts as a lock function (similar to Caps Lock key). Press again to exit the Red Shift function.

Annotation Library

Set Up/Preset Program page 8/10 and 9/10 contain the annotation library scripts.

These scripts are specific to the selected exam category and user preset. Each user preset within each exam category may have its own unique annotation library scripts.

```
97/07/03 10:47:13
739L
USER PARAM      SYSTEM PARAM  PRESET PROG  CUSTOM DISP
CATEGORY : RAD/ABDOMEN  PRESET NAME : General Abd
PAGE : 8/10      PRIOR      NEXT      CONTENTS
COMMAND : SAVE    RESET    DELETE    EXIT

***** Application (Annotation Library 1) *****
Annotation library 1: LIVER
Annotation library 2: PANCREAS
Annotation library 3: AORTA
Annotation library 4: PORTAL VEIN
Annotation library 5: GALL BLADDER
Annotation library 6: KIDNEY
Annotation library 7: IVC
Annotation library 8: COMMON BILE DUCT

Annotation library 9: HEPATIC VEIN
Annotation library 10: MEDIAL
Annotation library 11: LOWER
Annotation library 12: MID
Annotation library 13: SPLEEN
Annotation library 14: LATERAL
Annotation library 15: UPPER
Annotation library 16: PROXIMAL

*TRACKBALL* and *SET* are available.
```



Entering/Editing Scripts

Use the **Trackball** to move the arrow cursor to the desired Annotation Library location number.

Press **Set**. The 20 character space for that library location will be in reverse video.

Add or edit the desired script. Select the next library location and press **Set**.

*NOTE: To avoid saving unwanted changes, select the RESET function and press **Set**.*

To save all entries and edits, **Trackball** to the SAVE selection and press **Set**.

The system prompt

“ Overwrite existing data? ‘Y’ or ‘N’ ”

is displayed. Press ‘Y’ to rewrite and save data for the current user preset. Press ‘N’ to program a new user preset with the new annotation library scripts.

```
97/07/03 10:47:13
739L
USER PARAM      SYSTEM PARAM  PRESET PROG  CUSTOM DISP
CATEGORY : RAD/ABDOMEN  PRESET NAME : General Abd
PAGE       : 8/10      PRIOR       NEXT      CONTENTS
COMMAND    : SAVE      RESET       DELETE      EXIT

***** Application (Annotation Library 1) *****
Annotation library 1: LIVER
Annotation library 2: PANCREAS
Annotation library 3: AORTA
Annotation library 4: PORTAL VEIN
Annotation library 5: GALL BLADDER
Annotation library 6: KIDNEY
Annotation library 7: IVC
Annotation library 8: COMMON BILE DUCT

Annotation library 9: HEPATIC VEIN
Annotation library 10: MEDIAL
Annotation library 11: LOWER
Annotation library 12: MID
Annotation library 13: SPLEEN
Annotation library 14: LATERAL
Annotation library 15: UPPER
Annotation library 16: PROXIMAL

'TRACKBALL' and 'SET' are available.
```



Entering/Editing Scripts (cont'd)

Annotation library scripts 1-8 appear in the Sub Menu page 1, scripts 9-16 appear in Sub Menu page 2 and scripts 17-24 appear in Sub Menu page 3.

```
97/07/03 10:47:18
739L
USER PARAM      SYSTEM PARAM  PRESET PROG  CUSTOM DISP
CATEGORY : RAD/ABDOMEN  PRESET NAME  :General Abd
PAGE       : 9/10      PRIOR        NEXT      CONTENTS
COMMAND    : SAVE      RESET        DELETE    EXIT

***** Application (Annotation Library 2) *****
Annotation library 17: DISTAL
Annotation library 18: LEFT
Annotation library 19:
Annotation library 20:
Annotation library 21: RIGHT
Annotation library 22: ILIAC
Annotation library 23:
Annotation library 24:

'TRACKBALL' and 'SET' are available.
```




Displaying Library Scripts

To review the Comment Library scripts:

Press **Comment**. The Library menu for the designated exam category appears.

Use the **Sub-Menu Select** rocker switch to cycle through the three pages of scripts available.

The Library Sub-Menu display shows the first 14 characters of each 20 character script.

| | | | |
|----------------|---------------|--------------|-----------------|
| | | | |
| AO | LIVER | GAL. BLA. | RIGHT KIDNEY |
| LEFT KIDNEY | PANC- REAS | SPLEEN | HV |

To annotate an image using the library:

Use the **Trackball/Arrow** keys to place the annotation cursor in the desired location before typing.

Use the **Sub-Menu Select** rocker switch, if necessary, to display the desired script.

Press the top/bottom of the appropriate rocker switch to write the library script starting at the position of the cursor.



Editing Annotations

Back space over any error(s) made. Blank spaces take the place of the letter(s) that was there. Continue typing the annotation after back spacing over all incorrect letters.

To delete previous character(s):

1. Press **Back Space** as many times as necessary to make the deletion.
2. Retype the annotation from the point where backspacing was stopped.
3. Position the cursor and type over existing text.

To move through the text eight characters at a time:

1. Press **Tab** to move to the right (Keyboard Tab preset = Normal).
2. Press **Shift** and **Tab** to move to the left.

To move through the text a word at a time:

1. Press **Tab** to move to the right (Keyboard Tab preset = Word)
2. Press **Shift** and **Tab** to move to the left.

NOTE: Annotations wrap to the next line when they are within one character of the right margin.



Body Patterns

Overview

Body Patterns Available

Customizing Body Pattern Packages

Selecting a Body Pattern Package

This chapter shows how to use the body pattern annotation feature of the LOGIQ™ 500. Refer to the *Basic Scan and Customizing Your System* chapters in the LOGIQ™ 500 User Manual for more thorough explanations.



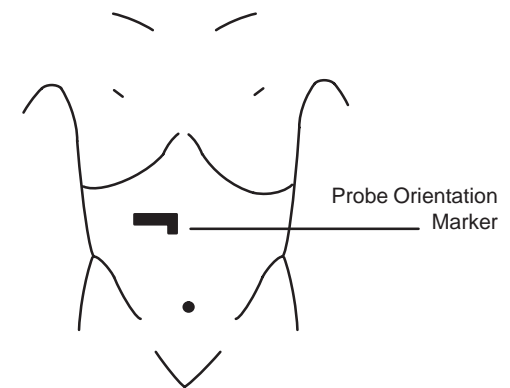
Overview

Body patterns are a simple graphic of a portion of the anatomy that is frequently scanned.

Eight packages, of sixteen body patterns each, can be customized in the Set Up/System Parameters page 4/6.

One of the eight body pattern packages is then designated as the default package to be displayed. A different package may be designated for each user application preset within each exam category.

The body pattern is generally displayed in the lower left corner of the screen. Its placement can vary with the format of the display.



Probe Marker

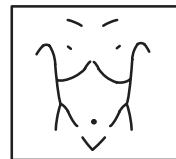
A marker is used to illustrate the probe position. This marker can be placed with the **Trackball** and rotated with the **Zoom Size/Rotation** control.

The body pattern and probe marker can serve as a reference for patient and probe positioning when images are archived.



Body Patterns Available

The following are the body patterns available as they appear in the body pattern package selection cycle:



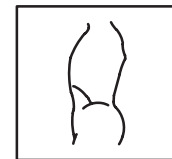
Supine



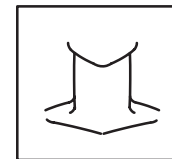
Right Oblique



Left Oblique



Left Decubitus



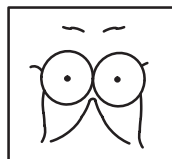
Neck



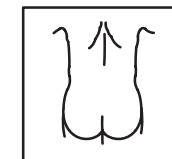
Right Oblique Neck



Left Oblique Neck



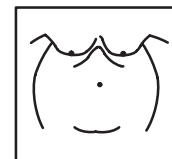
Mammo



Prone



Right Decubitus



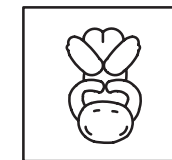
Pregnancy



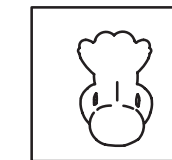
Right Breech



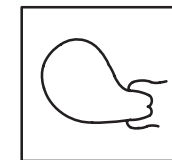
Left Breech



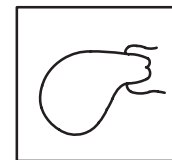
Vertex Brow Up



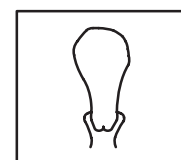
Vertex Brow Down



Antiverted Uterus



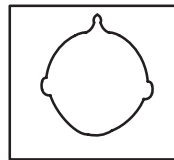
Retroflex Uterus



Transverse Uterus



Body Patterns Available (cont'd)



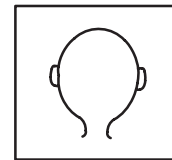
Head



Left Head



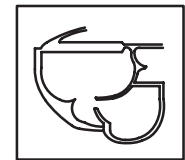
Right Head



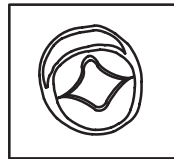
Back Head



Liver



PLAX



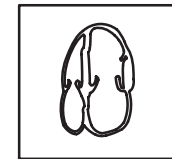
PSAX-Mitral Valve



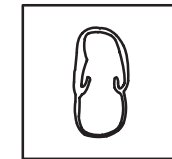
PSAX-Left Ventricle



PSAX-Aortic Valve



Apical 4 Chamber



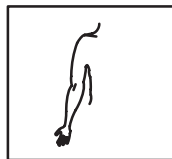
Apical 2 Chamber



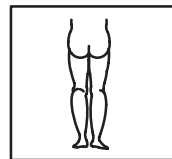
Aortic Arch



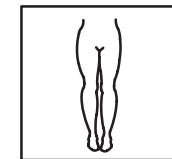
Sub-costal 4 Chamber



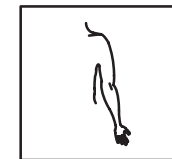
Right Arm



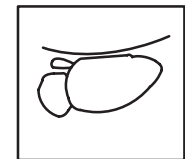
Poster Leg



Anter Leg



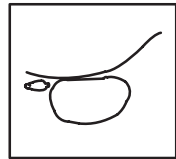
Left Arm



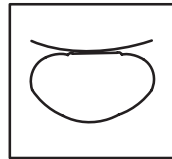
Prostate Sagittal Medial



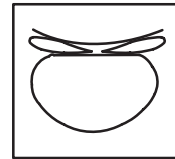
Body Patterns Available (cont'd)



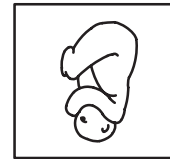
Prostate
Sagittal Lateral



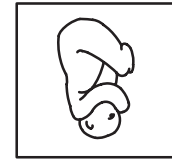
Prostate
Transverse



Prostate
Transverse



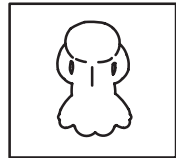
Left Vertex



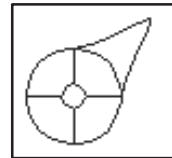
Right Vertex



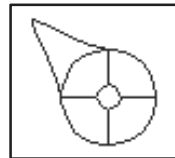
Breech Brow Up



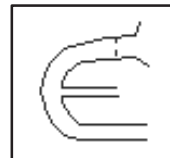
Breech Brow Down



Breast Left



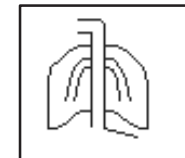
Breast Right



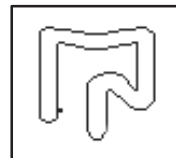
Duodenum



Stomach



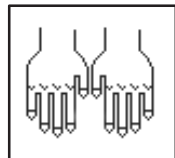
Lung



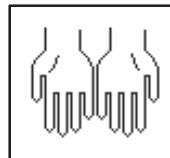
Intestine



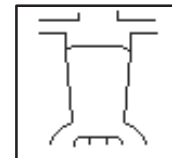
Ovary



Hand Back



Hand Palm



Dog Abdomen



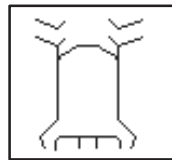
Dog Right



Body Patterns Available (cont'd)



Dog Left



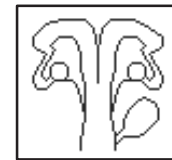
Cat Abdomen



Cat Right



Cat Left



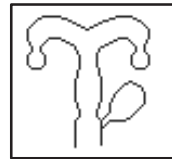
Cattle Uterus



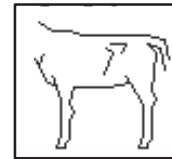
Cattle Left



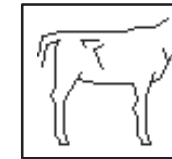
Cattle Right



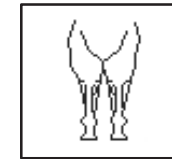
Horse Uterus



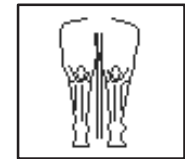
Horse Left



Horse Right



Horse Front



Horse Rear



Blank

Customizing Body Pattern Packages

The 8 body pattern packages may be customized to accommodate user preference. The 16 individual body patterns in the 8 packages can be changed. This effects the contents of the package selected for factory and user presets.

The Body Pattern Package Number (1–8) selected for each factory preset cannot be changed.

Use the **Trackball** to move the arrow cursor to the word “Submenu” of the desired body pattern package number to be customized.


Press **Set**. The body pattern selection Sub-Menu appears.

```

GE Medical Systems                                01/08/97 14:20:36
USER PARAM          SYSTEM PARAM          PRESET PROG          CUSTOM DISP
PAGE      : 4/ 6          PRIOR      NEXT      CONTENTS
COMMAND   : SAVE      RESET      DELETE      EXIT

***** System Setup (Body Pattern) *****
Body Pattern Package 1      : Submenu
Body Pattern Package 2      : Submenu
Body Pattern Package 3      : Submenu
Body Pattern Package 4      : Submenu
Body Pattern Package 5      : Submenu
Body Pattern Package 6      : Submenu
Body Pattern Package 7      : Submenu
Body Pattern Package 8      : Submenu
Body Pattern Probe Change Erase : Off On
Body Pattern Unfreeze Erase   : Off On
Body Pattern Copy to Active Side: Off On

*TRACKBALL* and *SET* are available.
  
```





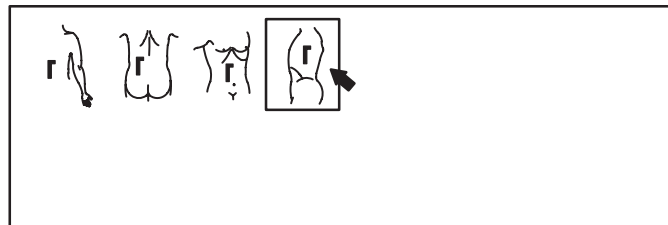
Customizing Body Pattern Packages (cont'd)



The rectangle in the display represents space for two rows of body patterns (two Sub-Menu display pages) with space for eight body patterns in each row.

Use the **Trackball** to move the arrow cursor to a desired body pattern location.

Press **Set**. A box appears around a Body Pattern or blank space.



Use the **Ellipse** rocker switch to cycle through the body pattern choices.

When the desired body pattern is displayed, use the **Trackball** and **Zoom Size/Rotation** knob to position the probe orientation marker to the desired default position on the body pattern.

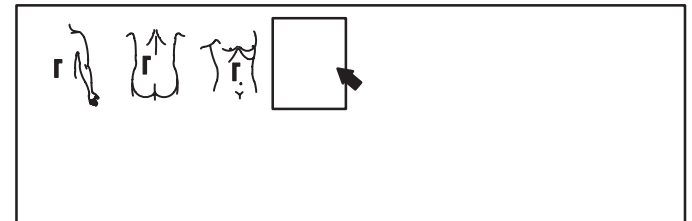
Press **Set** to complete the selection for that menu position. As many as sixteen selections can be made for each body pattern package.



Customizing Body Pattern Packages (cont'd)

To delete a body pattern in a package:

1. Use the **Trackball** to position the arrow cursor over the pattern to be deleted.
2. Press **Set**. A box appears around the Body Pattern.
3. Use the **Ellipse** rocker switch to cycle to the blank body pattern selection.
4. Press **Set** to record a blank space for that body pattern location.



Selecting a Body Pattern Package

The “Body Pattern Package” parameter on Set Up/Preset Program page 1/10 allows for choosing one of the eight customized body pattern packages for each user preset in each exam category. This package will be the default package for the current user preset within the selected exam category.

The “Body Pattern Probe Mark Preset” parameter allows for the probe mark preset to be turned on or off.

NOTE: Remember that these two preset parameters can be different for each user preset within each exam category.

```

97/07/03 10:45:51
739L
USER PARAM      SYSTEM PARAM  PRESET PROG  CUSTOM DISP
CATEGORY : RAD/ABDOMEN  PRESET NAME : General Abd
PAGE : 1/10      PRIOR      NEXT      CONTENTS
COMMAND : SAVE    RESET    DELETE    EXIT

***** Application *****
Body Pattern Probe Mark Preset : Off On
Body Pattern Package           : 1 2 3 4 5 6 7 8
Comment Erase at Display Change : Off On
Comment Home Position Horizontal : 2
Comment Home Position Vertical  : 2
Comment Clear Key Function      : All Line
Trackball Function at Freeze    : No Measure Comment Body

*TRACKBALL* and *SET* are available.
  
```



Measurements

- Measurement Controls
- Measurement Key Functions
- Measurement Cursors
- Erasing Measurements
- Measurement Unit Format
- B-Mode Measurements
- Doppler Mode Measurements
- M-Mode Measurements
- CFM B-Mode Measurements
- Measurement Clear

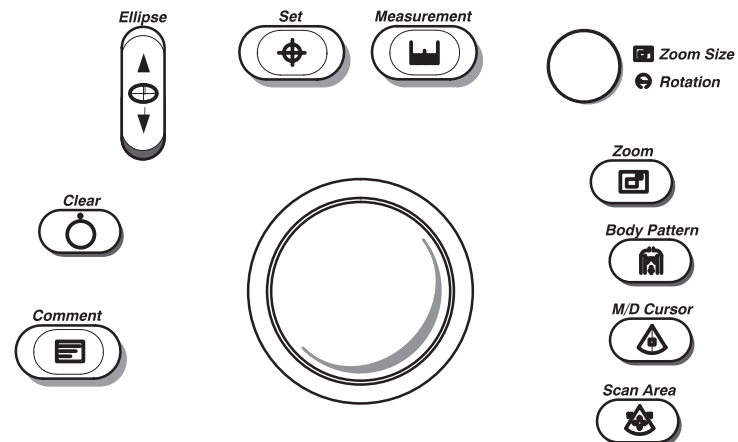
This chapter shows how to make basic measurements with the LOGIQ™ 500. These measurements are the basis for all measurements taken in the exam category calculation selections. Refer to the *General Measurements and Calcs* chapter in the LOGIQ™ 500 User Manual for more thorough explanations.



Measurement Controls

Measurement controls are arranged around the Trackball for maximum efficiency. The main keys/controls involved are:

- Measurement:** Enables specific measurement functions and calculation soft menus.
- Ellipse:** Enables ellipse measurements.
- Trackball:** Used to move the measurement cursors.
- Set:** Fixes the cursor for measurements or completes the measurement sequence.
- Clear:** Erases measuring cursor and measurement data from the display during a measurement sequence. Clears all cursors and measurements from the display when not performing a measurement.





Measurement Key Functions

The following table indicates the types of generic measurements available when the **Measurement** key is pressed and no specific calculation is chosen. The type of measurement depends on the current scan mode and the number of times the **Measurement** key is pressed.

| Key Pressed | MODE | | | |
|-------------|----------------------------|-------------------------------------|---|----------------------------|
| | B | Doppler (with B) | M (with B) | CFM (with B) |
| Once | Distance Ellipse/Circle | Peak Velocity | Tissue Depth (Distance) | Distance Ellipse/Circle |
| Twice | Trace/Circle | TAMAX/TAMIN/ TAMEAN/TAMODE | Time Interval | Trace/Circle |
| Three Times | Gray Scale Echo Level | 2 Velocities Slope/Time Interval | Depth Difference Slope/Time Interval | Point Velocity |
| Four Times | | Time Interval | | Gray Scale Echo Level |

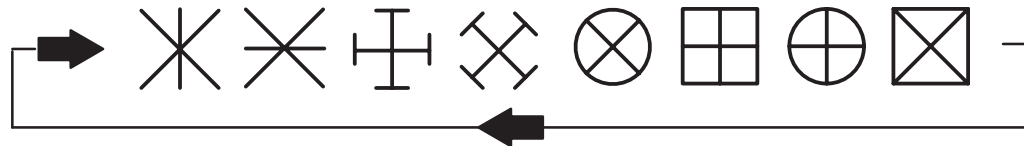


Measurement Cursors

During the measurement process, the fixed and active cursors are an “X” symbol. The color of the active and fixed cursors is selected in the Set Up/System Parameter Menu page 2/6.

Once the measurement sequence is complete, the cursor symbol changes to one of the eight shown below.

These symbols appear in the sequence shown.



Erasing Measurements

Pressing **Clear** erases all measurements and calculations on the display. Measurements and calculations, however, remain on the report pages.

Rotating the **Cine Scroll** control erases measurements.

Pressing **New Patient** erases all measurements and calculations on the display and clears the report pages.

Unfreezing the image erases measurements from the display only, not from the report pages.

Adding a new measurement that exceeds the maximum number of allowable measurements erases the first or oldest measurement.

To edit/delete a measurement from a report page, highlight the measured value, **Back Space** or **Space** out the value and press **Set** to delete.



Measurement Unit Format

“Time Unit” and “Length Unit” on Set Up/Preset Program page 3/10 are used to set the labeling of time (ms or sec) and length (mm or cm).

```
97/07/03 10:46:05
739L
USER PARAM      SYSTEM PARAM  PRESET PROG  CUSTOM DISP
CATEGORY : RAD/ABDOMEN  PRESET NAME : General Abd
PAGE : 3/10      PRIOR      NEXT      CONTENTS
COMMAND : SAVE    RESET    DELETE    EXIT

***** Application (Measurement) *****
Time Unit      : ms  sec
Length Unit    : mm  cm
Circ/Area Method: Trace Ellipse Circle 2Dist Diameter
Echo Level Method: Box3mm Box5mm Box7mm
Heart Rate Method: Auto Manual
VCRPB Calib Method: Auto Manual
Average Activity : Off On
Max velocity(Advanced Vascular) : Off On
Average number  : 3
Mask Image      : Off On
TA Max Auto     : Off On
Add 1 Week to EDD : Off On
Display EDD with GA Value: Off On
Diastole/Systole Determination : Auto Manual
R Delay Time of End Systole Prior Edge : 50
End Systole period from Prior Edge : 300
Media Selection for Fetal Trend : NO
Measurement Clear Operation : Meas.-only with-Comment

*TRACKBALL* and *SET* are available.
```

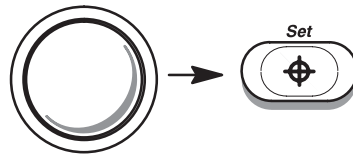


B-Mode Measurements

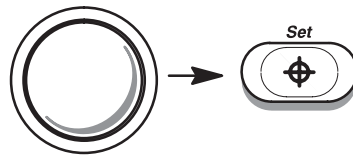
Distance



Press **Measurement** once.



Use the **Trackball** to move the “×” cursor to the measurement start point. Press **Set** to fix the measurement start point cursor and to display a second cursor.



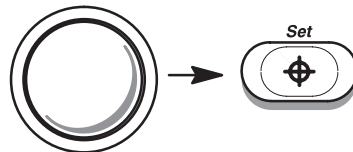
Use the **Trackball** to move the second “×” cursor to the measurement end point. Press **Set** to complete the measurement and fix the Distance value displayed on the bottom part of the screen.



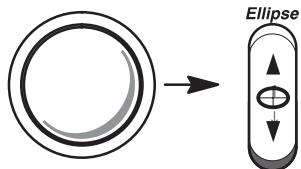
Circumference/Area - Ellipse



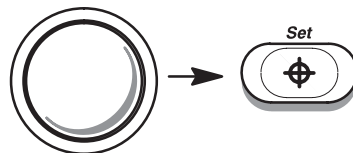
Press **Measurement** once.



Use the **Trackball** to move the “×” cursor to either end of the major axis of the area to measure. Press **Set** to fix the start point cursor.



Use the **Trackball** to move the second cursor to the major axis measurement end point. Press the top of the **Ellipse** rocker switch. An ellipse having an initial circle shape appears.



Use the **Trackball** to position the ellipse, as necessary, and to size the measured axis. Press **Set** to complete the ellipse measurement and display the circumference and area.



Circumference/Area - Ellipse (cont'd)

Fine Tuning the Ellipse measurement

Prior to completing the ellipse measurement, the following keys can be used to fine tune the measurement.

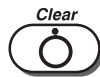


Press the **Measurement** key to toggle the activation of the measurement cursors.

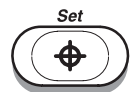


Press the top of the **Ellipse** rocker switch to increase the size of the minor axis.

Press the bottom of the **Ellipse** rocker switch to decrease the size of the minor axis.



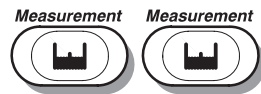
Press **Clear** once to erase the ellipse and the current data measured. The original cursor is displayed to restart the measurement. Pressing **Clear** a second time exits the measurement function without completing the measurement.



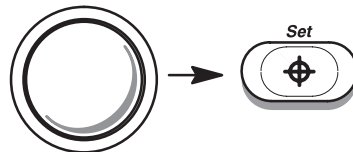
Press **Set** to complete the ellipse measurement.



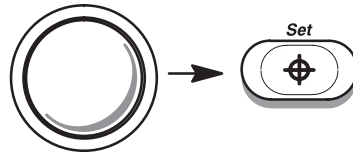
Circumference/Area - Trace



Press **Measurement** twice to display a dot “⊙” cursor on the screen.



Use the **Trackball** to move the dot “⊙” cursor to the measurement start point. Press **Set** to change the dot “⊙” cursor to a “×” cursor.



Use the **Trackball** to trace the measurement area. Press **Set** to fix the Circumference value displayed on the bottom of the screen and calculate the area.

*NOTE: When using the trace method, the **Zoom Size/Rotation** knob can be used to edit the trace line. Turn it clockwise or counterclockwise to erase the line (bit by bit) back from its current point. This erase function is limited to a small portion of the most recent trace.*

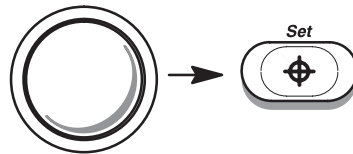


Doppler Mode Measurements

Peak Velocity



Press **Measurement**. The “×” cursor with a vertical dotted line appears.



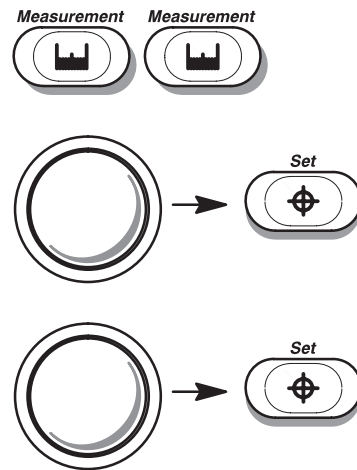
Use the **Trackball** to move the cursor to the desired point of measurement in the Doppler Spectrum.

Press **Set** to fix the velocity cursor. The velocity measurement in m/s or cm/s will be displayed at the bottom of the screen.



TAMAX/TAMIN/TAMEAN/TAMODE – Auto/Manual

The value measured depends upon “D Realtime Trace Method” selection in Setup/Custom Display page 12/17. The selections are Peak (TAMAX), Floor (TAMIN), Mean (TAMEAN) and Mode (TAMODE).



Press **Measurement** twice. A dot “⊙” cursor appears if the default method is manual. A “×” cursor with a vertical dotted line appears if the trace default method is auto.

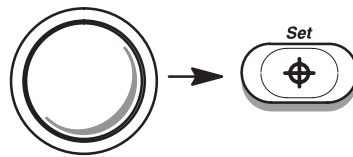
Use the **Trackball** to move the cursor to the trace start point in the Doppler spectrum. Press **Set** to fix the start point.

If D Realtime Auto Trace (on or calc) is the default method or Trace Auto is turned on, use the **Trackball** to position the vertical cursor at the second value (end point).

Press **Set**. The system automatically fixes both cursors and traces the maximum value between the two points.



TAMAX/TAMIN/TAMEAN/TAMODE – Auto/Manual (cont'd)



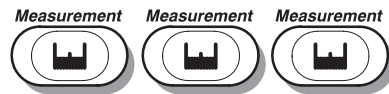
If D Realtime Auto Trace (off) is the default method, use the **Trackball** to trace the maximum values of the desired portion of the spectrum.

Press **Set** to complete the measurement.

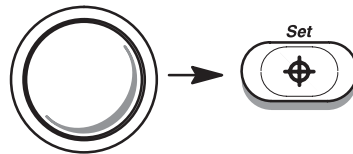
*NOTE: When using the manual trace method, the **Zoom Size/Rotation** knob can be used to edit the trace line. Turn it clockwise or counterclockwise to erase the line (bit by bit) back from its current point. Only a limited amount can be erased this way. The entire trace cannot be erased by this method.*



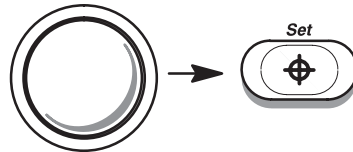
Slope/Time Interval



Press **Measurement** three times. A “×” cursor with vertical dotted lines appears.



Use the **Trackball** to move the cursor to the measurement start point. Press **Set** to fix the start point.

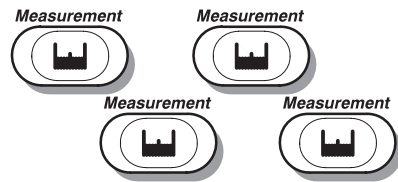


Use the **Trackball** to move the second cursor to the measurement end point. Press **Set** to complete the measurement.

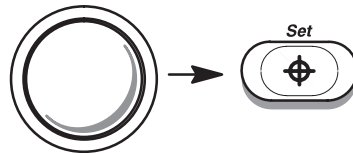
The two peak end point velocities, time interval and slope are displayed.



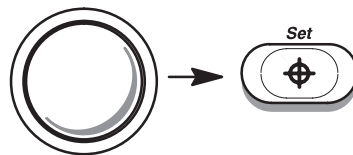
Time Interval



Press **Measurement** four times. A “×” cursor with vertical dotted lines appears when the cursor is in the Doppler spectrum.



Use the **Trackball** to move the cursor to the measurement start point. Press **Set** to fix the first cursor.



Use the **Trackball** to move the second cursor to the measurement end point. Press **Set** to complete the measurement.

The time interval between the two cursors is displayed.

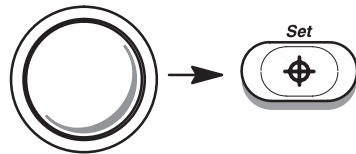


M-Mode Measurements

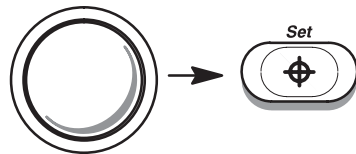
Tissue Depth



Press **Measurement** once. A “×” cursor with a vertical dotted line appears.



Use the **Trackball** to move the “×” cursor to the most anterior point to be measured. Press **Set** to fix the start point.

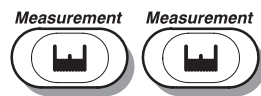


Use the **Trackball** to move the second point to the most posterior point to be measured. Press **Set** to complete the measurement.

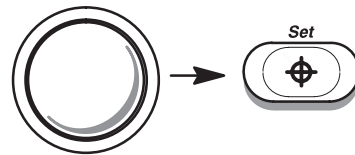
The vertical distance between the two points is displayed at the bottom of the screen.



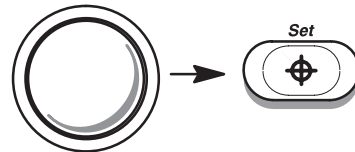
Time Interval



Press **Measurement** twice. A “×” cursor with a vertical dotted line appears when the cursor is in the M-Mode portion of the display.



Use the **Trackball** to move the cursor to the measurement start point. Press **Set** to fix the first cursor.

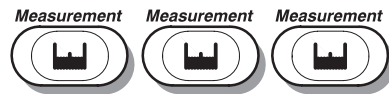


Use the **Trackball** to move the second cursor to the measurement end point. Press **Set** to complete the measurement.

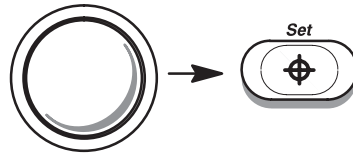
The time interval between the two cursors is displayed at the bottom of the screen.



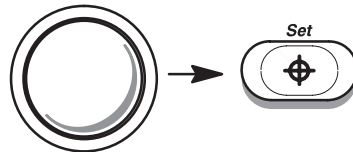
Depth Difference with Time and Slope



Press **Measurement** three times. With the cursor in the M-Mode timeline area, a “x” cursor with a vertical dotted line is displayed.



Use the **Trackball** to position the measurement start point. Press **Set** to fix the start point.



Use the **Trackball** to position the measurement end point. Press **Set** to complete the measurement.

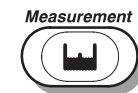
The depth difference, time interval and slope between the two end points is displayed at the bottom of the screen.



CFM B-Mode Measurements

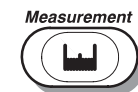
Distance

Distance is measured the same as B/W B-Mode. See *Measurements 6* for the measurement steps.



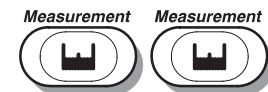
Circumference/Area - Ellipse

Circumference/ Area - Ellipse is measured the same as B/W B-Mode. See *Measurements 7* for the measurement steps.



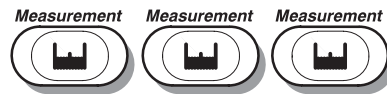
Circumference/Area - Trace

Circumference/ Area - Trace is measured the same as B/W B-Mode. See *Measurements 9* for the measurement steps.





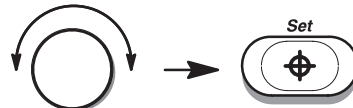
Velocity Point



Press **Measurement** three times. A “×” cursor appears.



Use the **Trackball** to move the cursor to the desired portion of the display.



Use the **Zoom Size/Rotation** control to adjust to the angle of blood flow. Press **Set** to complete the measurement and to display the velocity and angle values.

 Zoom Size

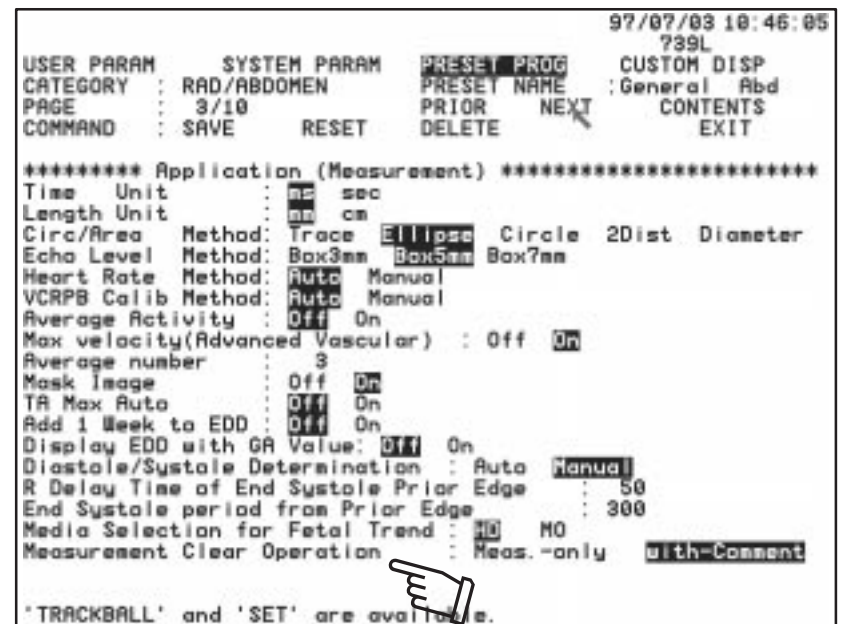
 Rotation

Potential for misdiagnosis. The CFM B-Mode velocity point measurement only provides an average velocity estimate and should not be used as a substitute for PW Doppler velocity measurement. Use PW Doppler Mode to obtain measurements from specific portions of the Doppler spectrum.



Measurement Clear

A parameter is available in the Set Up/Preset Program menu page 3/10. "Measurement Clear Operation" allows the user to decide if only measurements will be erased (not comments) when the **Clear** key is pressed or if both measurements and comments will be erased when the **Clear** key is pressed.





User OB Tables

Overview

Programming a User Table

Adding a User Table to the Measurement Menu

Adding a Table to the Report Page

This chapter shows how to create and use the User Programmable OB Tables of the LOGIQ™ 500. Refer to the *OB/GYN and Customizing Your System* chapters in the LOGIQ™ 500 User Manual for more thorough explanations.

Overview

Five user defined OB calculation tables can be programmed into the LOGIQ™ 500. These tables can be structured to appear in the OB Measurement sub menu or the OB Report page. The User Table Editor is found in the Set Up/Preset Program menu page 7/10.

```

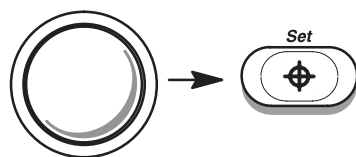
97/08/20 05:39:16
LA39
USER PARAM      SYSTEM PARAM  PRESET PROG  CUSTOM DISP
CATEGORY : CARDIOLOGY  PRESET NAME : General Card
PAGE : 7/10        PRIOR      NEXT      CONTENTS
COMMAND : SAVE      RESET      DELETE     EXIT

***** Application (Measurement Submenu) *****
Report Format      : Submenu
User Table Editor : Submenu
Sequence 1        : Submenu
Sequence 2        : Submenu
Sequence 3        : Submenu
Sequence 4        : Submenu
Sequence 5        : Submenu
Sequence 6        : Submenu
Sequence 7        : Submenu
Sequence 8        : Submenu
Measurement Menu B : Submenu
Measurement Menu M : Submenu
Measurement Menu D : Submenu
Measurement Menu CFM : Submenu
Cardiac Calculation : Submenu
D Realtime Calc.  : Submenu

*TRACKBALL* and *SET* are available.

```

Programming a User Table



Use the **Trackball** to place the arrow cursor over User Table Editor. Press **Set** to display the User Table Programming Main Menu.

The User Table programming main menu appears.

```
Hospital Name                                01/09/97 14:06:07
                                             C364

                USER TABLE PROGRAMMING

Table Select :  TBL1
                TBL2
                TBL3
                TBL4
                TBL5

Dimension   :  Dist (mm)
                Circ (mm)
                Area (mm2)

Standard Dev :  SD_Age

Title      :  TBL1
Author Name :
Note      :
Min. Data  :  1
Interval   :  1

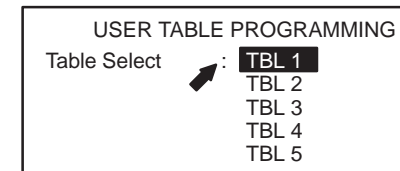
                TABLE_EDIT                                EXIT

'TRACKBALL' and 'SET' are available.
```



Programming a User Table (cont'd)

Use the **Trackball** to place the arrow cursor on the desired table number TBL1 to TBL5. Press **Set** to select the desired table.



Use the **Trackball** to place the arrow cursor on the desired table dimension. The choices are Dist (mm) for distance in millimeters, Circ (mm) for circumference in millimeters and Area (mm²) for area in square millimeters. Press **Set** when the cursor is over the correct dimension.



Use the **Trackball** to move the arrow cursor to the title block. Type in the desired table title (maximum 4 characters).

Press **Return**. Type in the author's name (maximum 8 characters).






Programming a User Table (cont'd)

Press **Return**. Type in any desired notes (maximum 30 characters). Press **Return**.

Type in the minimum or beginning data value for the table (maximum 4 digits). Press **Return**.

Type in the interval value between each table data point (maximum 4 digits). Press **Return**.

The selection "Table-Edit" should now be highlighted. Press **Set**.

| | |
|-------------|---|
| Title | : |
| Author Name | : |
| Note | : |
| Min. Data | :  |
| Interval | : |

| |
|--|
|  TABLE-EDIT |
|--|



Programming a User Table (cont'd)

The Table-Edit Menu allows for adding data, editing data or clearing (deleting) a User Table.

For each data point, the weeks (2 digits), days (1 digit) and deviation (2 digits) must be entered.

| | | | | | | | | |
|---------------|---|-------|------------------------|-------|------------|-------------------|----|------|
| Hospital Name | | | | | | 01/09/97 14:06:40 | | |
| | | | | | | C364 | | |
| TABLE : TBL5 | | | UNIT : mm ² | | PAGE : 1/2 | | | |
| 1 | 0 | 00±0 | 21 | 00±0 | 41 | 00±0 | 61 | 00±0 |
| 2 | 0 | 00±0 | 22 | 00±0 | 42 | 00±0 | 62 | 00±0 |
| 3 | 0 | 00±0 | 23 | 00±0 | 43 | 00±0 | 63 | 00±0 |
| 4 | 0 | 00±0 | 24 | 00±0 | 44 | 00±0 | 64 | 00±0 |
| 5 | 0 | 00±0 | 25 | 00±0 | 45 | 00±0 | 65 | 00±0 |
| 6 | 0 | 00±0 | 26 | 00±0 | 46 | 00±0 | 66 | 00±0 |
| 7 | 0 | 00±0 | 27 | 00±0 | 47 | 00±0 | 67 | 00±0 |
| 8 | 0 | 00±0 | 28 | 00±0 | 48 | 00±0 | 68 | 00±0 |
| 9 | 0 | 00±0 | 29 | 00±0 | 49 | 00±0 | 69 | 00±0 |
| 10 | 0 | 00±0 | 30 | 00±0 | 50 | 00±0 | 70 | 00±0 |
| 11 | 0 | 00±0 | 31 | 00±0 | 51 | 00±0 | 71 | 00±0 |
| 12 | 0 | 00±0 | 32 | 00±0 | 52 | 00±0 | 72 | 00±0 |
| 13 | 0 | 00±0 | 33 | 00±0 | 53 | 00±0 | 73 | 00±0 |
| 14 | 0 | 00±0 | 34 | 00±0 | 54 | 00±0 | 74 | 00±0 |
| 15 | 0 | 00±0 | 35 | 00±0 | 55 | 00±0 | 75 | 00±0 |
| 16 | 0 | 00±0 | 36 | 00±0 | 56 | 00±0 | 76 | 00±0 |
| 17 | 0 | 00±0 | 37 | 00±0 | 57 | 00±0 | 77 | 00±0 |
| 18 | 0 | 00±0 | 38 | 00±0 | 58 | 00±0 | 78 | 00±0 |
| 19 | 0 | 00±0 | 39 | 00±0 | 59 | 00±0 | 79 | 00±0 |
| 20 | 0 | 00±0 | 40 | 00±0 | 60 | 00±0 | 80 | 00±0 |
| SAVE | | CLEAR | | SETUP | | NEXT-PG | | EXIT |



Programming a User Table (cont'd)

The menu choices at the bottom of the Table Edit Menu allow:

| | |
|---------|--|
| SAVE | Saves the table in its current form. |
| CLEAR | Clears or deletes the entire table (and title). |
| SET UP | Returns to the User Table Programming Set Up menu. |
| NEXT-PG | Goes to the next page to continue data entry. |
| EXIT | Exits the User Programmable Table function. |

Trackball to one of the above choices and press **Set**.

When exit is selected without doing a "Save", all additions or edits are lost. The table reverts to its previous state.



Adding a User Table to the Measurement Menu

Once programmed, User OB Tables automatically appear in their designated spaces in the OB measurement and calculation menu.

Refer to the User Manual OB/GYN section for details on the menu positions for user tables.

Adding a Table to the Report Page

The LOGIQ™ 500 allows for user control of each exam category summary report measurement display format.

Except for the protected 5 lines of each report page (that has hospital and patient information) and the bottom area for calculations and comments, measurements can be added, deleted and the vertical position (“y”) of the measurements can be customized by the user.



Adding a Table to the Report Page (cont'd)

If the current exam category has an associated summary report page, select the Report Format menu option to change the vertical (y) position of the measurement elements on the report page. The elements that can be edited depend on each report page.

```
97/08/20 05:39:16
LA39
USER PARAM      SYSTEM PARAM  PRESET PROG  CUSTOM DISP
CATEGORY : CARDIOLOGY  PRESET NAME : General Card
PAGE : 7/10        PRIOR      NEXT  CONTENTS
COMMAND : SAVE     RESET     DELETE     EXIT

***** Application (Measurement Submenu) *****
Report Format      : Submenu
User Table Editor : Submenu
Sequence 1        : Submenu
Sequence 2        : Submenu
Sequence 3        : Submenu
Sequence 4        : Submenu
Sequence 5        : Submenu
Sequence 6        : Submenu
Sequence 7        : Submenu
Sequence 8        : Submenu
Measurement Menu B : Submenu
Measurement Menu M : Submenu
Measurement Menu D : Submenu
Measurement Menu CFM : Submenu
Cardiac Calculation : Submenu
D Realtime Calc.  : Submenu

*TRACKBALL* and *SET* are available.
```

Adding a Table to the Report Page (cont'd)

The following is an example of the USA OB Report Page. To change the position of a measurement:

From the Set Up/Preset Program Menu, page 7/10, use the **Trackball** to place the arrow cursor over Report Format and press **Set**. The report format editor screen appears.

| HOSPITAL NAME | | | | | | 01/29/97 22:06:53 | |
|--------------------------------------|-------------|-------------|---------------|-------------|-------------|-------------------|--|
| | | | | | | C551 | |
| REPORT FORMAT EDITOR FOR OB USA | | | | | | | |
| MEASUREMENTS | | | | | | | |
| NAME | Ypos | | NAME | Ypos | | | |
| BPD (HADLOCK) | 6 | | HC (HADLOCK) | 7 | | | |
| OFD (HC) | 8 | | AC (HADLOCK) | 9 | | | |
| FL (HADLOCK) | 10 | | CRL (HADLOCK) | 11 | | | |
| GS (HELLMAN) | 12 | | | | | | |
| CALCULATIONS | | | | | | | |
| NAME | Xpos | Ypos | NAME | Xpos | Ypos | | |
| CI | 1 | 20 | EFW | 29 | 20 | | |
| FL/BPD | 1 | 21 | SD | 39 | 20 | | |
| FL/AC | 1 | 22 | SD | 29 | 20 | | |
| FL/HC | 1 | 23 | LMP (GA) | 26 | 23 | | |
| HC/AC | 1 | 24 | GA (LMP) | 32 | 24 | | |
| CUA | 46 | 24 | EDD (LMP) | 32 | 25 | | |
| EDD (CUA) | 46 | 25 | | | | | |
| SAVE | | | | EXIT | | | |
| 'TRACKBALL' and 'SET' are available. | | | | | | | |



Adding a Table to the Report Page (cont'd)

Use the **Trackball** or **Return** to position the highlighted area over the “Ypos” of the measurement to be changed.

Type the new position number.

Use the **Trackball** to highlight any additional positions to be changed.

When all changes are complete, highlight Save and press **Set**.

To Add or Delete a measurement:

Enter the Report Format Editor in the same manner as “To change the position”.

Use the **Trackball** to highlight the desired measurement name (to delete or change) or highlight a blank area (to add).

- To delete a name, type in all spaces.
- To change a name, type over the current name.
- To add a name, type in the new name.

NOTE: When adding or changing a measurement name, it must contain two important elements: Measurement type. For example, GS, BPD, CRL, HC.

Author's name. The author's name must appear in parentheses, for example (Hadlock), (Hellman).

Highlight Save and press **Set** to record all changes. Highlight Exit and press **Set** to return to the Set Up/Preset Program menu.

| MEASUREMENTS | | | |
|---------------|------|---------------|------|
| NAME | Ypos | NAME | Ypos |
| BPD (HADLOCK) | 6 | HC (HADLOCK) | 7 |
| OFD (HC) | 8 | AC (HADLOCK) | 9 |
| FL (HADLOCK) | 10 | CRL (HADLOCK) | 11 |
| GS (HELLMAN) | 12 | | |



This page left blank intentionally.



User Presets

- Overview
- Defining a User Preset
- Deleting a User Preset/Name
- Recall Preset
- Archiving User Presets
- Loading User Presets
- Index of Preset Parameters

This chapter shows how to create and modify User Application Presets of the LOGIQ™ 500. Refer to the *Customizing Your System* chapter in the LOGIQ™ 500 User Manual for more thorough explanations.



Overview

A maximum of eight factory application preset choices for each exam category can be displayed using the Preset top menu choice. Factory default presets CANNOT be changed by the user.

There can be a maximum of eight user application presets for display on the Preset sub-menu, which are user-defined. Once programmed, user presets will be displayed as page one.

Preset parameters that are exam category dependent and available for customization are found in the Set Up/Preset Program and Custom Display menus. Parameters found on the first six pages of Set Up/Custom Display are also probe dependent within the user application preset.

Note that parameters found in Set Up/System Parameters affect all exam categories, application presets (user and factory) and probes.

| B | Preset | Set Up | ECG |
|---------------|---------------|---------------|---------------|
| Preset name-1 | Preset name-3 | Preset name-5 | Preset name-7 |
| Preset name-2 | Preset name-4 | Preset name-6 | Preset name-8 |



Defining a User Preset

Adding a Preset

To define a User Preset (1–8), first ensure that the system:

- is set to the proper exam category by using **New Patient** or **ID/Name** keys.
- has the desired probe connected and activated.
- has all keyboard controls (mode, depth, gain, etc.) set to the desired values.

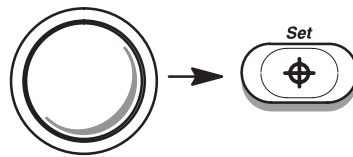
Select the **Set Up** Top Menu. From the Set Up Sub-Menu, select Custom Display or Preset Program.

Make all desired changes to the parameters in the Custom Display and Preset Parameter Sub Menus.

| B | Preset | Set Up | ECG |
|----------------|----------------|-------------|-------------|
| Custom Display | Preset Program | Save Values | User Define |
| System Paramtr | User Paramtr | Utility | Diag |



Adding a Preset (cont'd)



When all changes to the Preset Program and Custom Display menus are complete, use the **Trackball** to move the arrow cursor to **SAVE**. Press **Set**.

The message “Input User Preset Number (1–8)” appears at the bottom of the monitor.

Enter the desired preset number. The Preset Name at the top of the menu now displays the number entered (1–8).

NOTE: If a user application preset was used at the start of the process, the system prompt states:

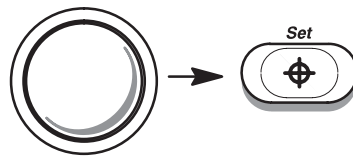
“ Overwrite Existing Data? ‘y’ or ‘n’ ”

Enter ‘y’ to write over the existing user preset.

Enter ‘n’ to get the message: “Input User Preset Number (1-8)” and create a new user preset.



Naming a User Preset



The Input User Preset Number 1-8 can be replaced with a custom description. To give the user preset a name instead of a number:

Use the **Trackball** to move the arrow cursor over the Preset Name area. Press **Set**.

Type in the desired name for the User Preset in the designated exam category.

Use the **Trackball** to move the arrow cursor to SAVE and press **Set**.

Answer Yes to the question “Overwrite existing data? ‘Y’ or ‘N’” to save the new User Preset name.

IMPORTANT NOTE: To ensure that all parameters and the user preset name are saved by the LOGIQ™ 500 before exiting the Set Up function:

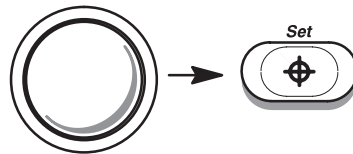
- Select System Parameters, any menu pages 1/6 through 6/6.
- **Trackball** to the SAVE function in the System Parameters menu and press **Set**.
- **IMPORTANT:** Answer ‘Y’ to overwrite existing data again.

These steps are important to ensure that the new user preset name is saved.



Deleting a User Preset/Name

Display any Set Up/Custom Display or Preset Program sub menu page.



Use the **Trackball** to move the arrow cursor to the preset name and press **Set**.

Type in the User Preset position number (1–8) and use the **Space Bar** to delete the rest of the name.

Use the **Trackball** to move the arrow cursor to Delete menu selection and press **Set**.

Answer Yes to the question. “ Delete data? ‘Y’ or ‘N’ ”.

Recall Preset

Recall Preset can be used during an examination to return the majority of the parameters to the previously saved values. Recall Preset is a selection found on page 3/3 of the Preset Top Menu.

If front panel and soft menu values were changed while scanning and the user desires to quickly return to the preset values, select Recall Preset.

NOTE: Recall Preset does not recover preset data that was deleted or changed once the Save function has been used.

Archiving User Presets

Customized User Application Presets can be saved to MOD. In the event of a rare hard drive failure, the presets could then be reloaded onto the new hard drive.

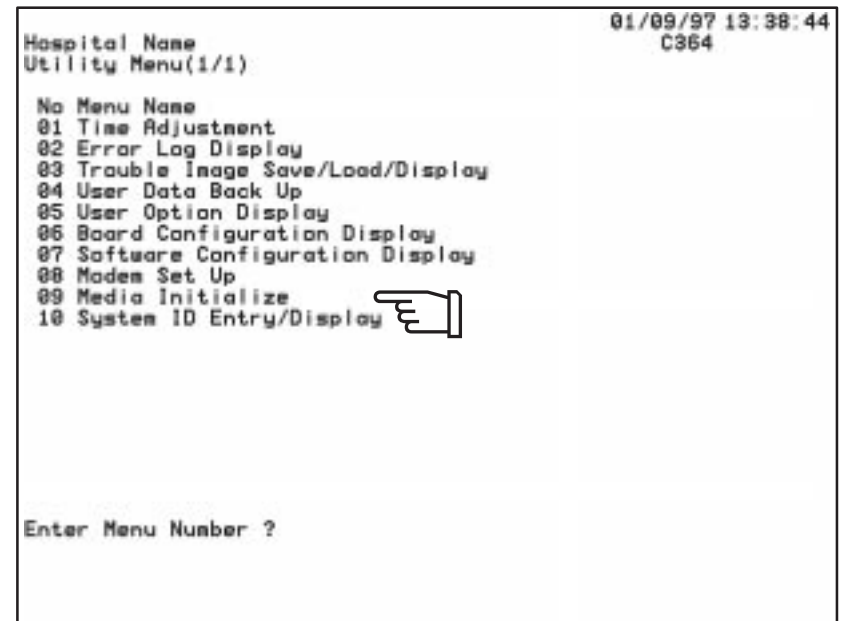
Before Archiving Presets

Before saving presets, the MOD must first be initialized (formatted) prior to saving user application preset data.

1. Select Set Up/Utility Menu.
2. Select #09 Media Initialize and press **Return**.
3. Insert a MOD into the drive and press **Return**.

The system then takes the time to format the MOD. This format is different from the one used for the image archive function. Use only MODs formatted in the Utility menu for archiving presets.

NOTE: If the presets have already been saved on the MOD, the MOD should be initialized again to ensure old preset data has been deleted from the MOD.



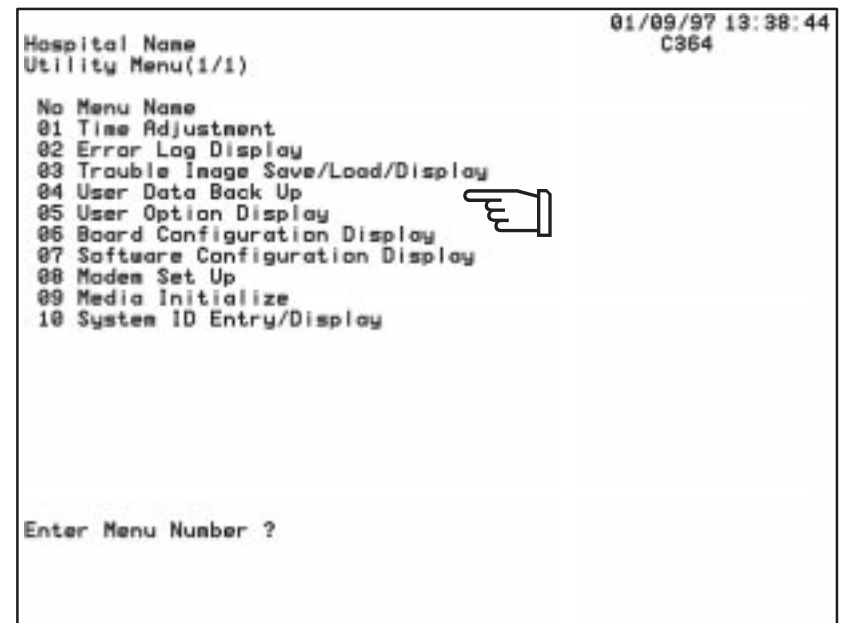
Archiving Presets

To save User Application Presets:

1. Select Set Up/Utility Menu.
2. Enter #04 User Data Backup from the Utility Menu and press **Return**.
3. Enter # 1 (Save) and press **Return**.
4. Set media to drive (ensure the MOD is in the drive) and press **Return**.
5. Select the exam category name to be saved (01–08) or “All System & Application Data” (09), enter its number and press **Return**.

The system takes a few minutes to save the selected item to the MOD. A succeed or fail message will be displayed.

Eject the MOD, label it and store it in a secure place for future reference.



Loading User Presets

If User Application Presets have been deleted or erased due to a hardware failure, they can be added by loading them from the archive MOD.

Preset Data and Preset Names should be deleted from the system before loading new or revised preset data/names.

To load presets back onto the system:

1. Type #04 User Data Backup from the Utility Menu and press **Return**.
2. Type #02 Load and press **Return**.
3. Set the media to the drive (ensure the MOD is in the drive) and press **Return**.
4. Select the application destination and press **Return**.
5. Eject the MOD and store it in a secure place.

```
97/08/20 06:29:38
LA39
User Data Back Up(1/1)
  1:Save  2:Load
Enter Menu Number ?2
Set a media to drive and then press any key.

No Data Name
01 System Data
02 Application(Rad/Abdomen) Data
03 Application(Obstetrics) Data
04 Application(Gynecology) Data
05 Application(Cardiology) Data
06 Application(Vascular) Data
07 Application(Urology) Data
08 Application(Small Parts) Data
09 All System & Application Data

Enter Menu Number ?1
Loading now
Succeeded
Press 'Y' to continue, or 'Ctrl+R' to return._
```

The system will take a few minutes to load the presets from the MOD to the system hard drive.

Remember that User Application Presets will appear on the first page of the Preset Sub Menu. Factory application presets will be on page two and the Recall preset selection is on page 3.



This page left blank intentionally.



Index of Preset Parameters

Overview

LOGIQ™ 500 presets provide the user with a powerful tool to customize initial system operation for a particular exam type. The organization structure of the presets in the system is as follows:

- Within each of the seven exam categories, there are eight user programmable and up to eight factory applications presets.
- Parameters used in these presets are divided into three groups: Preset Program, Custom Display, and System Parameters.
- Changes to System Parameters affect all applications presets in all exam categories. These are the only parameters that affect factory presets. Nothing else can be changed in factory presets by the user.
- User programmable application presets can also be affected by parameters found in Preset Program and Custom Display. These parameters can customize the preset within an exam category or every user preset within an exam category.
- For additional flexibility, the first eight pages of the Custom Display parameters are specific to the probe in use.

This index references where to find the parameter on the system menus and where to find parameter information in the manual.

Each parameter may be affected by a change in exam category, user preset, or probe. Each parameter description in this section is coded to show how it is affected. The codes are as follows:

| | |
|----|---|
| EC | Exam Category dependent |
| UP | User Preset dependent |
| P | Probe dependent |
| R | Reset to preset value with new patient selection. |



Index Presets

A

Acoustic Power B/M (%) [EC], Custom Display menu page 1, *Customize 25*

Acoustic Power D/CFM/PDI (%) [EC], Custom Display menu page 1, *Customize 25*

Acoustic Power Knob Effect [EC], Custom Display menu page 9, *Customize 50*

Add 1 Week to EDD [EC], Preset Program menu page 3, *Customize 115*

Annotation Library 1–24 [EC, UP], Preset Program pages 8 & 9, *Customize 141*

Audio Tone Equalizer [EC], Custom Display menu page 9, *Customize 53*

Auto B Melt at Unfreeze [EC, UP], Custom Display menu page 11, *Customize 58*

Auto Focus Control [EC], Custom Display menu page 9, *Customize 51*

AUX Auto Display [EC], Custom Display menu page 16, *Customize 78*

AUX Gain [EC, R], Custom Display menu page 16, *Customize 78*

AUX Position [EC, R], Custom Display menu page 16, *Customize 78*

Average Activity [EC], Preset Program menu page 3, *Customize 114*

Average Number [EC], Preset Program menu page 3, *Customize 115*

Averaging Number for Doppler Realtime Calc [EC, UP], Preset Program menu page 4, *Customize 119*

B

B Angle/Width (deg. mm) [EC, UP, P, R], Custom Display menu page 2, *Customize 29*

B Color Auto Start [EC, R], Custom Display menu page 10, *Customize 54*

B Color Map [EC, UP], Custom Display menu page 10, *Customize 55*

B Combi Focus Width [EC, UP, P], Custom Display menu page 2, *Customize 29*

B Dynamic Range [EC, UP, P, R], Custom Display menu page 2, *Customize 26*

B Edge Enhance [EC, UP, P, R], Custom Display menu page 2, *Customize 26*

B Focus Combi Number [EC, UP, P, R], Custom Display menu page 2, *Customize 29*

B Focus Dual Marker [EC, UP], Custom Display menu page 10, *Customize 54*

B Format B Dual [EC], Custom Display menu page 10, *Customize 55*



B Format B Single [EC], Custom Display menu page 10, *Customize 55*

B Frame Average [EC, UP, P], Custom Display menu page 2, *Customize 27*

B Gain [EC, UP, P, R], Custom Display menu page 2, *Customize 26*

B Gray Scale Map [EC, UP, P, R], Custom Display menu page 2, *Customize 28*

B Image Frequency [EC, UP, P, R], Custom Display menu page 2, *Customize 27*

B Image Softener [EC, UP, P, R], Custom Display menu page 2, *Customize 27*

B Rejection [EC, UP, P, R], Custom Display menu page 2, *Customize 29*

B Scale Mark [EC], Custom Display menu page 10, *Customize 56*

B Softener Level [EC, UP, P], Custom Display menu page 2, *Customize 27*

B Tag Auto Start [EC, R], Custom Display menu page 10, *Customize 55*

B Tag Center (%) [EC, R], Custom Display menu page 10, *Customize 55*

B Tag Width (%) [EC, R], Custom Display menu page 10, *Customize 55*

B Target Frame Rate [EC, UP, P], Custom Display menu page 2, *Customize 29*

B Video Inverse [EC], Custom Display menu page 10, *Customize 56*

B&W Printer Exposure Min Interval [sec], System Parameters menu page 5, *Customize 102*

B&W Printer Exposure Pulse Length [msec], System Parameters menu page 5, *Customize 102*

B/W Image & Color Graphics [EC], Preset Program menu page 2, *Customize 112*

Body Pattern Copy to Active Side, System Parameters menu page 4, *Customize 98*

Body Pattern Package [EC, UP], Preset Program menu page 1, *Customize 109*

Body Pattern Package 1–8, System Parameters menu page 4, *Customize 94*

Body Pattern Probe Change Erase, System Parameters menu page 4, *Customize 97*

Body Pattern Probe Mark Preset [EC, UP], Preset Program menu page 1, *Customize 109*

Body Pattern Unfreeze Erase, System Parameters menu page 4, *Customize 97*

BSA Type, System Parameters menu page 2, *Customize 89*

C

Cardiac Calculation, Preset Program menu page 7, *Customize 137*

Cardiac Measurement Choices [EC, UP], Preset Program menu page 5 & 6, *Customize 121*



- CFM ACE [EC, UP, P, R], Custom Display menu page 6,
Customize 43
- CFM B Angle/Width (deg/mm) [EC, UP, P, R], Custom Display
menu page 5, *Customize 41*
- CFM B Frame Average [EC, UP, P, R], Custom Display menu page 5,
Customize 40
- CFM B Gain [EC, UP, P, R], Custom Display menu page 5,
Customize 40
- CFM B High Resolution [EC, UP, P, R], Custom Display menu page 5,
Customize 40
- CFM B Wall Filter [EC, UP, P, R], Custom Display menu page 5,
Customize 41
- CFM Base Line (%) [EC, R], Custom Display menu page 14,
Customize 73
- CFM Capture Interval (s) [EC, R], Custom Display menu page 14,
Customize 71
- CFM Color Map 1 [EC], Custom Display menu page 14, *Customize 72*
- CFM Color Map 2 [EC], Custom Display menu page 14, *Customize 72*
- CFM Color Map 3 [EC], Custom Display menu page 14, *Customize 72*
- CFM Color Map 4 [EC], Custom Display menu page 14, *Customize 72*
- CFM Color Map 5 [EC], Custom Display menu page 14, *Customize 72*
- CFM Color Map 6 [EC], Custom Display menu page 14, *Customize 72*
- CFM Color Threshold [EC, UP, P, R], Custom Display menu page 5,
Customize 38
- CFM M Gain (Delta from B) [EC, UP, P, R], Custom Display menu
page 6, *Customize 42*
- CFM M Wall Filter [EC, UP, P, R], Custom Display menu page 6,
Customize 42
- CFM MR–Flow [EC, UP, P, R], Custom Display menu page 6,
Customize 43
- CFM MR–Flow Combi Number [EC, UP, P], Custom Display menu
page 6, *Customize 43*
- CFM Noise Blanker [EC, UP, P, R], Custom Display menu page 6,
Customize 43
- CFM Packet Size Map [EC, UP, P], Custom Display menu page 5,
Customize 40
- CFM Packet Size MpDtl [EC, UP, P], Custom Display menu page 5,
Customize 40
- CFM Packet Size SrvyDtl [EC, UP, P], Custom Display menu page 5,
Customize 40
- CFM Packet Size Survey [EC, UP, P], Custom Display menu page 5,
Customize 40
- CFM Persistence [EC, UP, P, R], Custom Display menu page 6,
Customize 43
- CFM Tag Auto Start [EC, R], Custom Display menu page 14,
Customize 72
- CFM Tag Center (cm/s) [EC, R], Custom Display menu page 14,
Customize 73



- CFM Tag Width (cm/s) [EC, R], Custom Display menu page 14, *Customize 73*
- CFM Target Frame Rate [EC, UP, P], Custom Display menu page 5, *Customize 39*
- CFM Target Frame Rate Dtl [EC, UP, P], Custom Display menu page 5, *Customize 39*
- CFM Threshold Turbulence [EC, UP, P, R], Custom Display menu page 5, *Customize 39*
- CFM Threshold Velocity [EC, UP, P, R], Custom Display menu page 5, *Customize 38*
- CFM Velo Dynamic Range [EC, UP], Custom Display menu page 14, *Customize 71*
- CFM Velocity (cm/s) [EC, UP, P, R], Custom Display menu page 5, *Customize 40*
- CFM Wall Echo Cancellor [EC, UP, P, R], Custom Display menu page 5, *Customize 39*
- CFM/PDI Focus Depth (%) [EC, UP, P], Custom Display menu page 5, *Customize 41*
- CFM/PDI Initial Mode [EC, R], Custom Display menu page 15, *Customize 74*
- CFM/PDI Initial Sequence [EC], Custom Display menu page 14, *Customize 72*
- CFM/PDI Sequence [EC, UP], Custom Display menu page 14, *Customize 72*
- CFM/PDI Shrink Angle/Width (deg, mm) [EC, UP, P, R], Custom Display menu page 4, *Customize 36*
- CFM/PDI Shrink in Triplex [EC, UP, P, R], Custom Display menu page 4, *Customize 36*
- CFM/PDI Spatical Filter [EC, UP, P], Custom Display menu page 5, *Customize 39*
- CFM/PDI Start Depth (mm) [EC, UP, P, R], Custom Display menu page 5, *Customize 41*
- CFM/PDI Vertical Size (mm) [EC, UP, P, R], Custom Display menu page 5, *Customize 41*
- CFM/PWD Ratio in Triplex [EC, UP, P, R], Custom Display menu page 4, *Customize 35*
- Cine Gauge Auto Display [EC], Custom Display menu page 9, *Customize 51*
- Cine Speed [EC, R], Custom Display menu page 9, *Customize 51*
- Circ/Area Method [EC], Preset Program menu page 3, *Customize 114*
- Col Applcat, System Parameters menu page 2, *Customize 91*
- Col Aux, System Parameters menu page 2, *Customize 92*
- Col Back Gnd, System Parameters menu page 2, *Customize 90*
- Col Comment, System Parameters menu page 2, *Customize 91*
- Col Dop Trac, System Parameters menu page 2, *Customize 92*
- Col Imag Crs, System Parameters menu page 2, *Customize 91*
- Col Mes Crs, System Parameters menu page 2, *Customize 91*
- Col Moving, System Parameters menu page 2, *Customize 92*
- Col Scale, System Parameters menu page 2, *Customize 91*



Col Sys Inf, System Parameters menu page 2, *Customize 91*

Color Printer Memory, System Parameters menu page 5, *Customize 101*

Color Printer Signal, System Parameters menu page 5, *Customize 101*

Color Printer Type, System Parameters menu page 5, *Customize 100*

Comment Clear Key Function [EC], Preset Program menu page 1, *Customize 110*

Comment Erase at Display Change [EC], Preset Program menu page 1, *Customize 110*

Comment Home Position Horizontal [EC, R], Preset Program menu page 1, *Customize 110*

Comment Home Position Vertical [EC, R], Preset Program menu page 1, *Customize 110*

CUA Selection Reset on New Patient, System Parameters menu page 1, *Customize 85*

CWD Base Line (%) [EC, R], Custom Display menu page 14, *Customize 71*

CWD Dynamic Range [EC, UP, P, R], Custom Display menu page 4, *Customize 36*

CWD Gain [EC, UP, P, R], Custom Display menu page 4, *Customize 36*

CWD Gray Scale Map [EC, UP, P, R], Custom Display menu page 4, *Customize 36*

CWD Non-aliasing mode [EC, R], Custom Display menu page 14, *Customize 71*

CWD Rejection [EC, UP, P, R], Custom Display menu page 4, *Customize 36*

CWD Velocity (cm/s) [EC, UP, P, R], Custom Display menu page 4, *Customize 37*

CWD Wall Filter (cm/s) [EC, UP, P, R], Custom Display menu page 4, *Customize 37*

D

D Audio to Speaker [EC], Custom Display menu page 13, *Customize 68*

D Audio Volume (%) [EC, R], Custom Display menu page 13, *Customize 68*

D Color Auto Start [EC, R], Custom Display menu page 12, *Customize 63*

D Color Map [EC, UP], Custom Display menu page 12, *Customize 63*

D Format (Side/Side, Full) [EC], Custom Display menu page 12, *Customize 64*

D Image Processing [EC], Custom Display menu page 13, *Customize 67*

D Mode Full B+ Cursor [EC], Custom Display menu page 12, *Customize 64*

D Mode Full D [EC], Custom Display menu page 12, *Customize 66*

D Mode Side/Side B Large [EC], Custom Display menu page 12, *Customize 65*



- D Mode Side/Side B Small [EC], Custom Display menu page 12, *Customize 65*
- D Mode Top/Bottom B Large [EC], Custom Display menu page 12, *Customize 65*
- D Mode Top/Bottom B Mid [EC], Custom Display menu page 12, *Customize 65*
- D Mode Top/Bottom B Small [EC], Custom Display menu page 12, *Customize 66*
- D Realtime Auto Trace [EC, R], Custom Display menu page 12, *Customize 63*
- D Realtime Trace Method [EC, R], Custom Display menu page 12, *Customize 63*
- D Tag Auto Start [EC, R], Custom Display menu page 12, *Customize 64*
- D Tag Center (%) [EC, R], Custom Display menu page 12, *Customize 64*
- D Tag Width (%) [EC, R], Custom Display menu page 12, *Customize 64*
- D Time Resolution [EC], Custom Display menu page 13, *Customize 68*
- D Type for Wall Filter [EC], Custom Display menu page 12, *Customize 62*
- D Video Inverse [EC], Custom Display menu page 13, *Customize 68*
- D/CFM Scale Mark [EC], Custom Display menu page 12, *Customize 62*
- Date Format, System Parameters, System Parameters menu page 1, *Customize 83*
- Delay Trigger Source, System Parameters menu page 2, *Customize 89*
- Diag Category, System Parameters, System Parameters menu page 1, *Customize 84*
- Diastole Velocity for PI [EC, UP], Preset Program menu page 4, *Customize 118*
- Diastole Velocity for RI [EC, UP], Preset Program menu page 4, *Customize 119*
- Diastole Velocity for S/D (D/S) [EC, UP], Preset Program menu page 4, *Customize 119*
- Diastole/Systole Determination [EC], Preset Program menu page 3, *Customize 116*
- Display Dop Frequency [EC], Custom Display menu page 13, *Customize 69*
- Display Dop PRF [EC], Custom Display menu page 13, *Customize 69*
- Display EDD with GA Value [EC], Preset Program menu page 3, *Customize 116*
- Display Height 1–3 [EC], Preset Program menu page 10, *Customize 143*
- Display Probe Name, System Parameters menu page 1, *Customize 87*
- Display TGC Curve [EC], Custom Display menu page 9, *Customize 53*



Display Unit Age 1–4 [EC], Preset Program menu page 10,
Customize 143

Display Unit Weight 1–2 [EC], Preset Program menu page 10,
Customize 143

Displayed T1 [EC], Custom Display menu page 9, *Customize 50*

Doppler Channel [EC, R], Custom Display menu page 12,
Customize 63

Doppler Realtime Calculation (EC, UP), Preset Program menu
page 7, *Customize 138*

E

ECG Audio Beat Sound [EC, R], Custom Display menu page 16,
Customize 77

ECG Audio Beat Sound Tone [EC], Custom Display menu page 16,
Customize 77

ECG Auto Display [EC], Custom Display menu page 16,
Customize 76

ECG Gain [EC, R], Custom Display menu page 16, *Customize 76*

ECG Heart Rate Display [EC], Custom Display menu page 16,
Customize 77

ECG Position [EC, R], Custom Display menu page 16, *Customize 77*

ECG R Delay 1 (ms) [EC, UP, R], Custom Display menu page 16,
Customize 77

ECG R Delay 1 to 2 (ms) [EC, UP, R], Custom Display menu
page 16, *Customize 77*

Echo Level Method [EC], Preset Program menu page 3,
Customize 114

EFBW Form (Europe), System Parameters menu page 2,
Customize 90

EFBW Form (Tokyo), System Parameters menu page 2,
Customize 90

End Systole Period from Prior Edge [EC, UP], Preset Program
menu page 3, *Customize 116*

Enter Depth [EC, UP, P, R], Custom Display menu page 1,
Customize 22

External Video Signal, System Parameters menu page 5,
Customize 100

F

Focus Depth (mm) [EC, UP, P, R], Custom Display menu page 1,
Customize 22

Frame Rate Display [EC], Custom Display menu page 9,
Customize 52

H

Heart Rate Method [EC], Preset Program menu page 3,
Customize 114

Hospital Name, System Parameters menu page 1, *Customize 83*



I

- ID/Name Prohibition After Measurement, System Parameters menu page 2, *Customize 89*
- Image Archive Compression [EC], Preset Program menu page 2, *Customize 112*
- Image Back Color [EC, UP], Custom Display menu page 9, *Customize 52*
- Image Gamma (%) [EC, UP], Custom Display menu page 9, *Customize 50*
- Image Mode [EC, R], Custom Display menu page 9, *Customize 49*
- Image Reverse [EC, UP, P, R], Custom Display menu page 1, *Customize 23*
- Image Rotation [EC, UP, P, R], Custom Display menu page 1, *Customize 23*
- Insite Access Enable, System Parameters menu page 1, *Customize 85*

K

- Keyboard LED Bright, System Parameters menu page 1, *Customize 85*
- Keyboard Menu Bright, System Parameters menu page 1, *Customize 85*
- Keyboard Tab, System Parameters menu page 1, *Customize 85*

L

- Language, System Parameters menu page 1, *Customize 84*
- Length Unit [EC], Preset Program menu page 3, *Customize 113*

M

- M Color Auto Start [EC, R], Custom Display menu page 11, *Customize 58*
- M Color Map [EC, UP], Custom Display menu page 11, *Customize 58*
- M Dynamic Range [EC, UP, P, R], Custom Display menu page 3, *Customize 31*
- M Edge Enhance [EC, UP, P, R], Custom Display menu page 3, *Customize 31*
- M Format (Side/Side, Full) [EC], Custom Display menu page 11, *Customize 59*
- M Gain (Delta from B) [EC, UP, P, R], Custom Display menu page 3, *Customize 31*
- M Gray Scale Map [EC, UP, P, R], Custom Display menu page 3, *Customize 32*
- M Image Frequency [EC, UP, P, R], Custom Display menu page 3, *Customize 32*
- M Image Softener [EC, UP, P, R], Custom Display menu page 3, *Customize 31*



- M Mode FULL B + Cursor [EC], Custom Display menu page 11, *Customize 59*
- M Mode Full M [EC], Custom Display menu page 11, *Customize 61*
- M Mode Side/Side B Large [EC], Custom Display menu page 11, *Customize 59*
- M Mode Side/Side B Small [EC], Custom Display menu page 11, *Customize 60*
- M Mode Simul PD Activity [EC], Custom Display menu page 11, *Customize 58*
- M Mode Top/Bottom B Large [EC], Custom Display menu page 11, *Customize 60*
- M Mode Top/Bottom B Mid [EC], Custom Display menu page 11, *Customize 60*
- M Mode Top/Bottom B Small [EC], Custom Display menu page 11, *Customize 60*
- M Peak Hold [EC, UP, P, R], Custom Display menu page 3, *Customize 32*
- M Rejection [EC, UP, P, R], Custom Display menu page 3, *Customize 32*
- M Scale Mark [EC], Custom Display menu page 11, *Customize 61*
- M Softener Level [EC, UP, P, R], Custom Display menu page 3, *Customize 32*
- M Tag Auto Start [EC, UP], Custom Display menu page 11, *Customize 58*
- M Tag Center (%) [EC, R], Custom Display menu page 11, *Customize 59*
- M Tag Width (%) [EC, R], Custom Display menu page 11, *Customize 59*
- M Video Inverse [EC], Custom Display menu page 11, *Customize 61*
- Mask Image [EC], Preset Program menu page 3, *Customize 115*
- Mask Image Characters, System Parameters menu page 2, *Customize 88*
- Maskline Record, System Parameters menu page 5, *Customize 102*
- Max Velocity (Advanced Vascular) [EC], Preset Program menu page 3, *Customize 115*
- Measurement Clear Operation [EC], Preset Program menu page 3, *Customize 117*
- Measurement Menu B [EC, UP], Preset Program menu page 7, *Customize 133*
- Measurement Menu CFM [EC, UP], Preset Program menu page 7, *Customize 133*
- Measurement Menu D [EC, UP], Preset Program menu page 7, *Customize 133*
- Measurement Menu M [EC, UP], Preset Program menu page 7, *Customize 133*
- Media Selection for Fetal Trend [EC], Preset Program menu page 3, *Customize 117*



N

Needle Guide Type [EC, UP, P, R], Custom Display menu page 1, *Customize 24*

New Patient Y/N Ask [EC], Preset Program menu page 10, *Customize 142*

O

OB Report Format, System Parameters menu page 2, *Customize 89*

Operation Error Beep, System Parameters menu page 1, *Customize 86*

P

Password 1–8, System Parameters menu page 6, *Customize 104*

Password Ask, System Parameters menu page 6, *Customize 103*

PCG Auto Display [EC], Custom Display menu page 16, *Customize 78*

PCG Filter, System Parameters menu page 2, *Customize 89*

PCG Gain [EC, R], Custom Display menu page 16, *Customize 78*

PCG Position [EC, R], Custom Display menu page 16, *Customize 78*

PDI ACE [EC, UP, P, R], Custom Display menu page 7, *Customize 47*

PDI B Frame Average [EC, UP, P, R], Custom Display menu page 7, *Customize 46*

PDI B Gain [EC, UP, P, R], Custom Display menu page 7, *Customize 46*

PDI B High Resolution [EC, UP, P, R], Custom Display menu page 7, *Customize 46*

PDI B Wall Filter [EC, UP, P, R], Custom Display menu page 7, *Customize 46*

PDI B/W Display [EC], Custom Display menu page 15, *Customize 74*

PDI Capture Interval (s) [EC, R], Custom Display menu page 15, *Customize 75*

PDI Color Threshold [EC, UP, P, R], Custom Display menu page 7, *Customize 44*

PDI Default Map [EC], Custom Display menu page 15, *Customize 75*

PDI Dynamic Range [EC, UP], Custom Display menu page 15, *Customize 75*

PDI M Gain (Delta from B) [EC, UP, P, R], Custom Display menu page 7, *Customize 46*

PDI M Wall Filter [EC, UP, P, R], Custom Display menu page 7, *Customize 47*

PDI MR–Flow [EC, UP, P, R], Custom Display menu page 7, *Customize 47*

PDI MR–Flow Combi Number [EC, UP, P], Custom Display menu page 7, *Customize 47*

PDI Noise Blanker [EC, UP, P, R], Custom Display menu page 7, *Customize 47*

PDI Packet Size Map [EC, UP, P], Custom Display menu page 7, *Customize 45*



- PDI Packet Size MpDtl [EC, UP, P], Custom Display menu page 7, *Customize 45*
- PDI Packet Size SrvyDtl [EC, UP, P], Custom Display menu page 7, *Customize 45*
- PDI Packet Size Survey [EC, UP, P], Custom Display menu page 7, *Customize 45*
- PDI Persistence [EC, UP, P, R], Custom Display menu page 7, *Customize 47*
- PDI Tag Auto Start [EC, R], Custom Display menu page 15, *Customize 75*
- PDI Tag Center (cm/s) [EC, R], Custom Display menu page 15, *Customize 75*
- PDI Tag Width (cm/s) [EC, R], Custom Display menu page 15, *Customize 75*
- PDI Target Frame Rate [EC, UP, P], Custom Display menu page 7, *Customize 45*
- PDI Target Frame Rate Dtl [EC, UP, P], Custom Display menu page 7, *Customize 45*
- PDI Threshold Power [EC, UP, P, R], Custom Display menu page 7, *Customize 44*
- PDI Velocity (cm/s) [EC, UP, P, R], Custom Display menu page 7, *Customize 46*
- PDI/PWD Ratio in Triplex [EC, UP, P, R], Custom Display menu page 4, *Customize 35*
- Physio Sweep Speed on B [EC, UP, P, R], Custom Display menu page 3, *Customize 31*
- Plug 1–BW, System Parameters menu page 5, *Customize 101*
- Plug 2–CLR, System Parameters menu page 5, *Customize 101*
- Port A, System Parameters menu page 5, *Customize 102*
- Port B, System Parameters menu page 5, *Customize 102*
- Port MIC, System Parameters menu page 5, *Customize 102*
- Power on Memory Test, System Parameters menu page 1, *Customize 86*
- Power on Status, System Parameters menu page 1, *Customize 86*
- Probe Direction Mark Display [EC], Custom Display menu page 9, *Customize 52*
- PWD Alternative Scan [EC, UP, P, R], Custom Display menu page 4, *Customize 35*
- PWD Base Line (%) [EC, R], Custom Display menu page 14, *Customize 70*
- PWD Dynamic Range [EC, UP, P, R], Custom Display menu page 4, *Customize 34*
- PWD Gain [EC, UP, P, R], Custom Display menu page 4, *Customize 34*
- PWD Gray Scale Map [EC, UP, P, R], Custom Display menu page 4, *Customize 34*
- PWD HPRF [EC, UP], Custom Display menu page 14, *Customize 70*
- PWD Rejection [EC, UP, P, R], Custom Display menu page 4, *Customize 34*



PWD Sample Volume (mm) [EC, UP, P, R], Custom Display menu page 4, *Customize 34*

PWD Velocity (cm/s) [EC, UP, P, R], Custom Display menu page 4, *Customize 34*

PWD Wall Filter (cm/s) [EC, UP, P, R], Custom Display menu page 4, *Customize 35*

PWD/CFM/PDI Penetration [EC, UP, P, R], Custom Display menu page 4, *Customize 33*

PWD/CFM/PDI Slant Auto Start [EC, UP, P, R], Custom Display menu page 4, *Customize 33*

R

RDelay Time of End Systole Prior Edge [EC, UP], Preset Program menu page 3, *Customize 116*

Record 1 B&W, System Parameters menu page 5, *Customize 99*

Record 1 Color, System Parameters menu page 5, *Customize 99*

Record 2 B&W, System Parameters menu page 5, *Customize 100*

Record 2 Color, System Parameters menu page 5, *Customize 100*

Report, System Parameters menu page 5, *Customize 100*

Report Cursor Blink, System Parameters menu page 1, *Customize 84*

Report Cursor Type, System Parameters menu page 1, *Customize 84*

Report Format [EC], Preset Program menu page 7, *Customize 122*

Report Video Inverse to Printer, System Parameters menu page 5, *Customize 99*

RI Calculation to bidirectional Flow [EC, UP], Preset Program menu page 4, *Customize 119*

S

Sequence 1–8 [EC], Preset Program menu page 7, *Customize 129*

Setup Blue Back Start, System Parameters menu page 2, *Customize 88*

Standby Time (min), System Parameters menu page 1, *Customize 86*

Standoff Setting [EC, UP, P, R], Custom Display menu page 1, *Customize 24*

System Error Erase Interval, System Parameters menu page 1, *Customize 87*

T

TA Max Auto [EC], Preset Program menu page 3, *Customize 115*

TGC Depth Remap [EC], Custom Display menu page 9, *Customize 51*

Time Format, System Parameters, System Parameters menu page 1, *Customize 84*

Time Unit [EC], Preset Program menu page 3, *Customize 113*

Timeline Format [EC], Custom Display menu page 11, *Customize 57*

Timeline Sweep Method [EC], Custom Display menu page 11, *Customize 57*



Timeline Sweep Speed [EC, UP, P, R], Custom Display menu page 3,
Customize 30

Trackball Function at Freeze [EC], Preset Program menu page 1,
Customize 110

U

User Define Key No 1, System Parameters menu page 3,
Customize 93

User Define Key No 2, System Parameters menu page 3,
Customize 93

User Define Key No 3, System Parameters menu page 3,
Customize 93

User Define Key No 4, System Parameters menu page 3,
Customize 93

User Define Key No 5, System Parameters menu page 3,
Customize 93

User Define Key No 6, System Parameters menu page 3,
Customize 93

User ID 1–8, System Parameters menu page 6, *Customize 104*

User Table Editor, Preset Program menu page 7, *Customize 125*

V

VCR Color Intensity [EC, R], Preset Program menu page 2,
Customize 112

VCR Play Audio [EC], Preset Program menu page 2, *Customize 111*

VCR Play Audio Volume (%) [EC, R], Preset Program menu page 2,
Customize 112

VCR Rec Audio Doppler [EC], Preset Program menu page 2,
Customize 111

VCRPB Calib Method [EC, R], Preset Program menu page 3,
Customize 114

Z

Zoom Auto Start [EC, UP, P], Custom Display menu page 1,
Customize 23

Zoom Factor [EC, UP, P, R], Custom Display menu page 1,
Customize 23

Zoom Reference [EC, UP, P], Custom Display menu page 1,
Customize 23

Zoom Reference Update [EC, UP], Custom Display menu page 9,
Customize 51