EXA**G**O

Exago
Manual

Contents

1.Safety instructions

1.1 Safety symbols

Please note the meaning of the following safety symbols:

	Warning: Read the user manual before using the device bearing this symbol
	Warning : Do not sit on the equipment
	Warning : Do not push the equipment if the castor wheels are locked
	ON / OFF switch
	Collect separately from other waste (see European Commission Directive for electronic waste). The device must be recycled at the certified recycling center.
CE	CE Mark

1.2 Environmental conditions of use

The device shall be operated in a clean atmosphere, without dust and smoke.

The device is designed and tested be operated within this range of temperature:

• -20°C to +60°C during transportation and storing
• +10°C to +40°C during operation.

The device is designed to be operated with a relative humidity range from 10 to 95% including condensation.
The device is designed for the following atmospheric pressures:
• 700 hPa to 1060 hPa while in operation
• 500 hPa to 1060 hPa during transportation and storing.

1.3 Electrical safety

This equipment is compliant with IEC standard 60601-1, Safety for Medical Electrical Equipment.

According to the standard, the equipment is classified as:

a) According to the type of protection against electrical shock:
Class I equipment

b) According to the degree of protection against electrical shock:
Type BF

c) According to the degree of protection against harmful water ingress:
IPX0 (device without protection against water ingress)

d) According to the degree of safety of application in presence of flammable anaesthetic mixture with air, oxygen or nitrous oxide, device not suitable for use in the presence of a flammable anaesthetic mixture with air, oxygen or nitrous oxide.

e) According to the mode of operation: Continuous operation

In order to ensure patient safety, please observe these warnings:

The equipment must be supplied by using the provided power cord including a connection to ground.

The equipment must be used with the power adapter supplied by IMV Imaging, reference Protek PMP120-13-2-B2. The use of any other power adapter is forbidden.

1.4 Battery

The equipment uses an internal Lithium battery. The battery should exclusively be replaced in the equipment by the identical type of battery provided by IMV Imaging. Replacing the battery by an incorrect type may cause excessive temperatures, fire or explosion. The Battery is a Lithium-Ion Polymer battery rating a voltage of 14.8 V and a capacity of 8400 mAh.

1.5 Surface temperatures

The probes provided with the device are compliant with the security standards concerning surface temperatures. The probes have been designed in order to never let the surface temperature exceed 41°C.

The Exago device has not been designed to be used together with a high frequency surgical device. A risk of patient burn might exist in case of failure in connection of the neutral electrode of the surgical high frequency device.

1.6 Probe safety

The probes supplied with the Exago equipment are intended to be used only with IMV imaging systems.

Never try to connect the supplied probes to any other ultrasound system. This can lead to irreversible damage on the probe connector and to the possibility of much higher acoustic output than required. This can also lead to patient burn due to overheating of the probe.

For safety and maintenance reasons, never disconnect a probe from the device without freezing the system first.
All probes provided with the Exago device are compliant with the standard ISO 10993-1 concerning biocompatibility of components used for probe manufacturing.

1.7 Other devices connection

The Exago equipment can be connected to several peripherals like:

• 	composite video printers
• 	USB peripherals (flash stick)
• 	External screen (DVI connection)

To ensure the electrical safety of the equipment:

All peripherals requiring a power input (printers, monitors etc.) must also use a medical isolation transformer or comply themselves with the electrical safety standard EN 60601-1. Otherwise, the patient electrical safety is no longer ensured.

This equipment can cause electromagnetic perturbations and alter the behaviour of another equipment. It may be needed to move the equipment or change his orientation in order to reduce this perturbation.

Always place the probe in the probe holder on the trolley or in another secured place when not used in order to avoid it from falling either on the patient or on the floor. Any crack or damage to the probe head can lead to electrical shock. Never use a probe that is damaged, that has been dropped or has suffered a severe collision until it has been inspected by an IMV Imaging customer service engineer.

Do not immerse the transducer connector in any liquid. Immersing it can destroy its electrical safety features.

2.Getting started

2.1 Connection and disconnection of probes

To connect a probe, put the probe connector in the opening provided for this purpose (Pic. 1). Turn the locker situated in the middle of the connector with a slight pressure in order to engage the locking mechanism. When the locking mechanism is engaged, make quarter turn so that the probe is connected.

Battery slot

Probe connector

Pic.1

After connecting a probe, always place the probe in a safe place (in one of the probe holders if the system is used with its trolley) in order to avoid any damage of the probe due to a shock or falling down.

Before disconnecting the active probe, make sure to freeze the image.

To disconnect a probe, make a quarter turn in order to unlock the connector. Take the connector out of the device and store the probe in an appropriate place protected from shocks.

When starting the device, always make sure to have a probe connected on the connector.

2.2 Use of Exago trolley

If the equipment is used with the Exago trolley, check that a probe is connected to the right hand side connector.

2.3 Starting of the device

To start/stop the equipment, turn on the power switch situated on back panel of the device (Pic. 2)

Then wait until the system starts and displays the user interface on the screen.

The Exago equipment starts in B mode with the probe connected. If no probe is connected, the system will display a label "No probe". In this case, connect a probe to the connector and press "Freeze", or restart the equipment.

2.4 Battery operation

Charging indicator

Power on/off

Pic.2
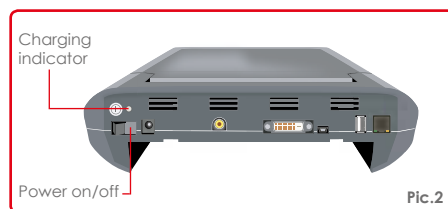
The Exago battery can be removed from the equipment by pressing the two clips located on the rear of the product. When inserting the battery back in the device, check that it is securely fastened. (Pic.1)

When the device is powered by the mains, the battery is charging whether the device is on or not. While the battery is charging, a charging indicator is visible on the back panel of the device.

3.Keyboard functions

Keys to navigate through the menu on screen

Shortcut to user defined annotation with (1-9 as free text)

Arrow in active imaging mode or calipers in Freeze. Use " Clear" to delete or Arrow in Freeze.

Patient menu.

Settings menu.

M Mode
Select to start M mode. Update to return to M Line adjustment.

PWD Mode menu

CFM Mode menu

B Mode menu

Clear annotations, arrows, biopsy guide or noise rejection.

In Freeze mode move to previous Cineloop image. Current image index is displayed on screen.

Measure menu.

When PW is activated from CFM, the "Update" key allows to come back to the CFM mode with the gate active.

Used to confirm selection items and activate. Active CFM/PW & M mode, zoom.

Report menu

Protocol menu

Cine loop records or allows to view clips

Probe menu.

Press select to display zoomed image or exit zoom.

Access frequency selection menu.

Scroll text lists, move cursor or adjust position of CFM/ PW box.

Use keys to adjust focus. Reset to return to initial TGC level.
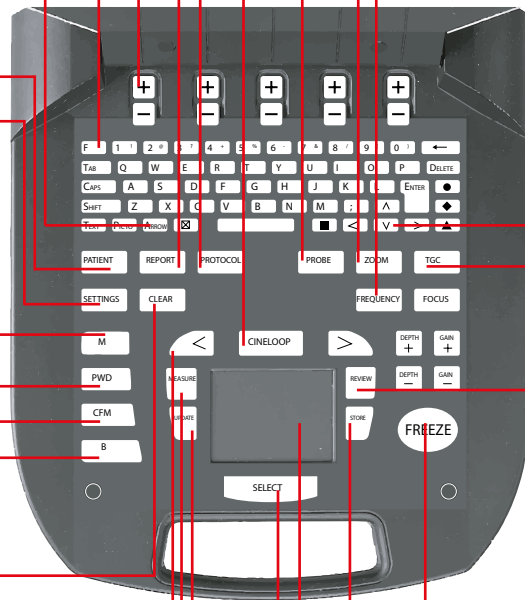
Review the image/clips.

Freeze and unfreeze the system

Store image

Touchpad used for menu selection, measurement cursors, validation of measurements, line positioning in M mode etc.
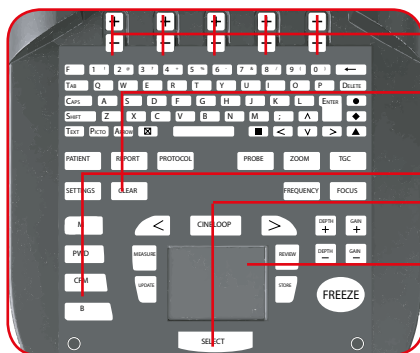
4.B mode and menu

Dote indicates the active image and the direction of the image in L/R, Up/Down.

Date, Time

Probe

Labels displaying settings of the menu e.g
Dyn-Dynamic
Brigh-Brightness
Freq-Frequency
FAvg-Frame avearage

Battery capacity

Use keys "Next/Previous to move through the menu.

Dynamic	Dynamic Range of B image.
Brightness	Adjust Brightness.
L/R, U/D	Image orientation (Left/Right or Up/Down).
Noise Reject	Signals will filter to provide the cleaner image.
Large image	Images use maximum screen in B and Dual mode.
Biopsy*	Activate biopsy needle on the screen indicating where the needle should travel.

Power	Transmit Power.
Dual	Compare two images in B mode.
Frame Average	Select: SLOW, SLMED, MFAST, FAST values.
Exa Cross	Cross Beam function. Used with linear probe only.
Smooth	Active in B and Dual mode. Can be saved in preset.

Keys to change settings of the contextual menu.

Exit Noise Rejector Biopsy

B mode and menu, exit Dual mode

Switch between left and right images in Dual mode

Noise reject window positioning adjustment

* Before using this feature, test this function in a water tank before use on a patient. The mechanical tolerance of the biopsy guide may exceed the expected values and the guiding channel . Press Biopsy or Clear to remove it. Needle guide only works with recommended IMV Imaging guide for probe. Check that biopsy guide and needle is properly attached to the probe.

5.CFM mode and menu

CFM box position or size can be adjusted using Touchpad or Cursor keys in Pre-trace CFM mode.

Date, Time

Probe

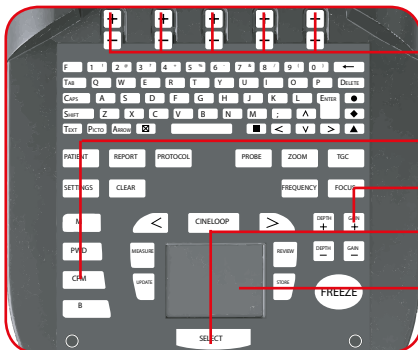Labels displaying settings of the menu

Labels displaying settings of the menu in CFM mode e.g. WFillter- Wall Filter, VesSize-Vessel Size, SFilter-Spatial Filter.

Battery capacity

Use keys under "Next/Previous to move along the menu.

Active CFM contextual menu:

PRF	Select proper value depending on the speed of the measured flow	Burst	High index increases CFM sensitivity and decreases CFM spatial resolution.
Wall Filter	Rejection of movements from vessel walls and tissues. High Wall Filter, slow speeds are rejected	Power	CFM transmit Power.
MinVelocity	Rejects the color on slow velocities. A high Min Velocity index cuts the color and slows velocity	Persistence	Frame averaging on CFM image.
Vessel Size	Optimization of colour sensibility according to the vessel size.	Spatial Filter	Smoothening of the CFM image.
Packet Size	High index increases CFM sensitivity and decreases CFM frame rate.	Invert	Inversion of the colour. CFM scale colour is also inverted.

Keys to change settings of the menu. Steering of CFM box on a linear probe.

CFM mode and menu.

CFM gain adjustment.

Press Select to switch from Pre-trace CFM to Active CFM.

Press Update to switch from Active CFM mode to Pre-trace CFM mode.

6.PW mode and menu

Active PW mode

Date, Time

Probe

Labels displaying settings of the menu e.g
WFilter-PW Wall Filter
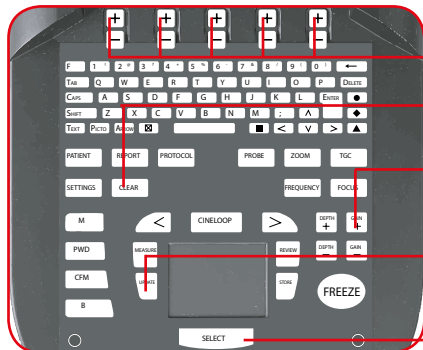Power label- Power

Battery capacity

Use keys under "Next/Previous to move along the menu.

Pre-trace PW mode

Adjust PW gate position and size on the B image or B/CFM image and adjust Steering,Gate size and Angle parameters before starting PW active mode. Use Select and Update to switch between Active and Pre-trace PW mode.

Select Gate Size and Steering angle (linear probes only).

Cancel Steering, Angle correction in Pre-trace or PW mode.

PW gain adjustment with the "Gain"

Press Update to switch from Active PW mode to Pre-trace PW mode. When PW is activated from CFM mode, the Update key allows to come back to CFM mode with the gate active.

Press Select to return to Active PW mode.

PRF	Select value.
Baseline	Select the spectrum. The frequency/velocity is updated on display.
Invert	Invert the frequency/velocity scale. It is updated on display.
Audio	Audio output volume.
Filter	PW Wall Filter.
Power	Transmit Power.

7.Measure menu

Freeze the system and access Measure menu. It will automatically initiate a first Distance measurement.

Date, Time

Probe

Labels displaying settings of the menu

Adjust the calipers positioning with Touchpad and Select.

Measurements are displayed on the screen with identification and color code

Battery capacity

Contexual menu of the measure menu.

| Distance	Four distances can be acquired on the same image. Choose distance in sequence in Tools to display the next caliper measurement. Four distances can be acquired on the same image.
Ellipse	Two ellipses can be measured on the same image.
Trace	If the trace is not closed, a straight line will be used to close it. It allows surface/parameter calculation.
Select	Selected item and related measurements are highlited.
Delete	Delete selected measurements on screen.
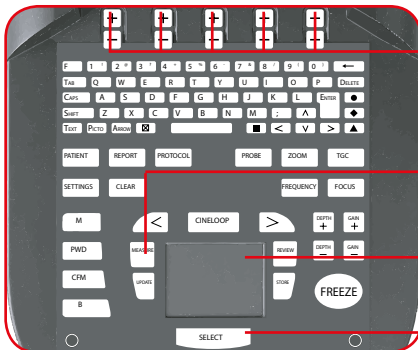
Keys to change settings of the menu.

Access measure menu and exit menu. .

Use Touchpad to adjust caliper positioning and validation. Terminate the measurement. Draw Trace countour.

Press Select to go back to the previous caliper adjustment.
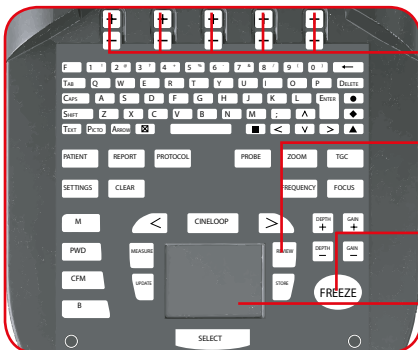
8.Review menu
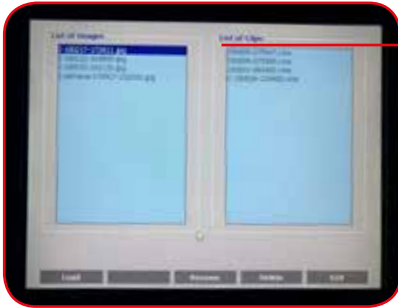
Review display includes the images and clips list. System will explore USB before exploring the internal memory. In order to access to internal memory, remove any connected USB device.

Load	Display the selected images or clips. Load images in cineloop to make or adjust measurements in post-processing. Press freeze to exit this mode.
Rename	Rename image/clip.
Delete	Delete image/clip.
Exit	Exit review menu.

For loaded clips

First image	Display the first image of the selected clip.
Play/Pause	Play or pause the reading of the selected clip.
Last image	Display the last image of the selected clip.
Store clip	Store current clip.

Keys to change settings of the contextual menu.

Access Review menu for reviewing images and clips.

Press Freeze to exit cineloop mode.

Use Touchpad to select file or clip.

9.Probe menu

Access Probe selection (if system used on dual port trolley),Pre-set menu for factory and user-defined pre-set selection. This key is only active when it is in live imaging.
Probe

Battery capacity

Probe 2	Only active if the device is used on dual port trolley.	
Probe 1	Displays the connected probe	
Preset	The menu displays a factory and user present lists.	

Preset menu

Load	Load selected Preset

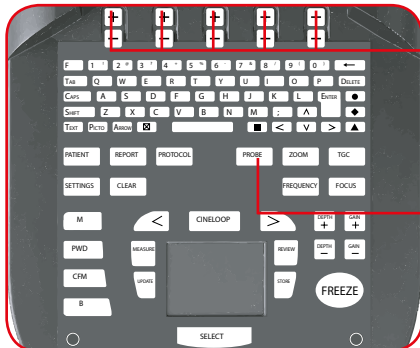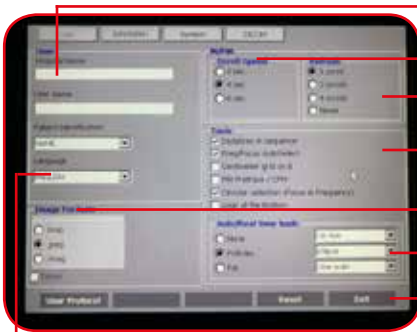|	
New	Save the current system settings into a user Preset file. Enter the file name in the "Save as" and press Enter key.
Rename	Enter a file name in the "Rename as" and press Enter key.
Delete	Delete selected user preset. Factory Preset can not be renamed or deleted.
Exit	Exit the preset menu.

Keys to change settings of the contextual menu. If no contexual keys used for 15 seconds, the system exits the probe menu.

Access Probe menu.

10. Settings

User folder

Enter user/patient informaton.

Duration of scrolling M/PW display. 4 sec by default.

Refresh frequency of B image.

Freq/Focus: B mode transmit focus and frequency automatically depending on the depth.
PW Pre-trace/CFM: displaces the PW gate on active CFM image. Active by default.
Circular selection: Frequency and focus brought up from one from one step to the next in a circular way.

Select image format. Dicom only allows to save the images only in this format.

AutoReal time tools:
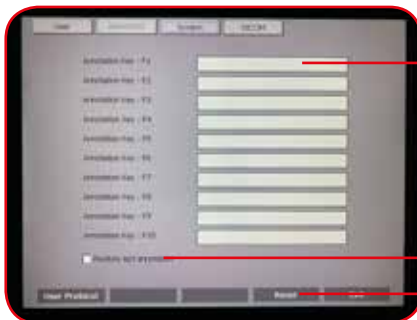Follicles-measurement of the diameter /ellipse of the dominant follicle.
Fat-measurement of fat and muscles. Both can be ajusted.
There is also Biotronics preset entitled DDI with L3130B probe.

Reset or Exit.

Select language. Chinese version is available. The key ● selects or cancels Chinese . The key ▲ selects the input for digits and other symbols non-ideogram.

Annotation folder

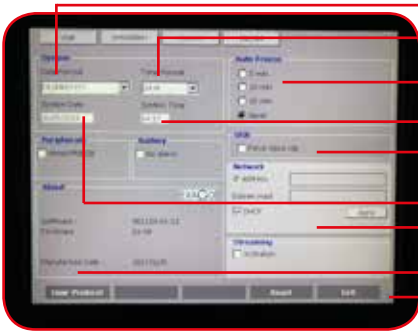Annotations of the saved image can be modified or new can be added.

Input user defined annotations. Annotations can be selected using the F+ keys on the keyboard.

Repeat the latest free text (not from the annotation list) entered with the Text button on the keyboard automatically when pressing Text.

Reset or Exit.

System folder

Select date format.

Select time format.

Period in which the system will automatically freeze if no key has been used.

Time of the day.

Improves storing clips on USB flash sticks.

Today´s date.

If DHCP is not activated, user should enter a valid IP address. Enter the standard subnet mask as 255.255.255.0 and press "Apply".

Displays system information as software revision level.

Use keys to Reset or Exit.

Dicom folder

Store Menu

Host: Storage server IP address.
Port: Storage server Port (default value is 104)
AE: Storage server application Entity name.
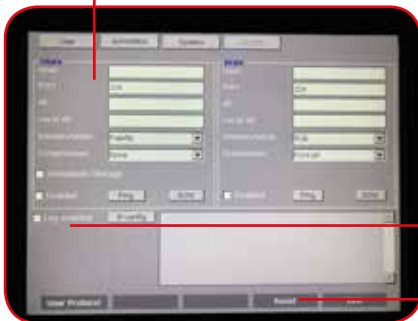Local AE: Application Entity name.
Interpretation: Image format. Pallet by default. If not accepted by the server, select RGB or Monochrome.
Compression: Image compression type. None by default. RLE-compressed.
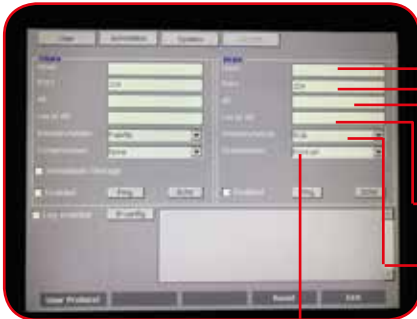Immediate Storage: if the box is ticked, the transfer to DICOM server is immediate when pressing store. When not ticked, the DICOM images can be saved in a Patient Report in DICOM format. Enter Patient ID if DICOM storage is used.

Information about network communication. Used in troubleshooting.

Reset or Exit.

Dicom folder

Print menu

Print server IP address. Provided by the network administrator

Print server Port (default is 104). Provided by the network administrator.

Print server Application Entity name. Allocated by the network administrator

Exago system application Entity name. Allocated by the network administrator

Pallete by default. If not accepted by the server, select RGB or Monochrome.

Screen orientation

Print

Pressing the Print key (black square located on the right of the space bar) will print the image on the Dicom storage server. Printing of images is possible during the examination or when the images are stored in .imag format. To enable the print on the Dicom print server, the Enabled checkbox should be checked.

The Ping key allows, the network authorizes it, to check IP connection to the server.

The Echo key checks the Dicom connection to the server using Port and AE identification.

User Protocol
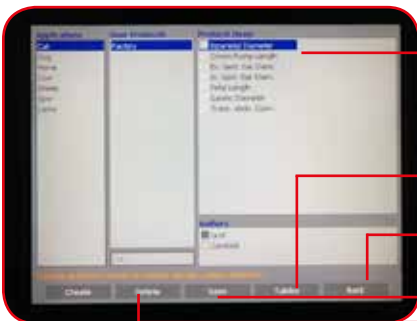
Choose application, user protocol and protocol items using Touchpad.

In Obstetrics application, display the current protocol data table in data or graphical mode. Next/Previous controls are used to review table of different authors.

Exit the User Protocol menu and return to Settings menu.

Save the created User protocol.

Delete the selected User protocol. To activate User Protocol click on Patient button, select the application in the Exam box. Selection can be done with/without opening a patient file.

Add a new User Protocols list. Start by selecting an application using the touchpad. For measurements by different users choose from the list. Save when selection is finished.

11. Protocol menu

The menu can be used during an examination or independently of an examination. Click on Patient and select the application and protocol for the examination in "Exam Box.
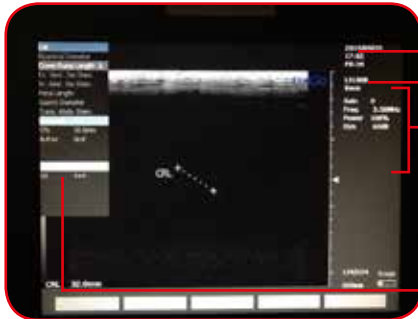
Date, Time

Probe

Labels displaying settings of the menu

Protocol and current measurement results will display on the left side of the image ((in weeks and days for gestation tables) GA = Gestation age

In case of use during the examination with a patient file, first create or select a patient, application etc. Freeze the image, select measurement to be performed in the protocol list using the Touchpad. Press Select.

To confirm storing of these results in the report, press Add. The number of validated and added results for each measurements is indicated in the protocol list after each item.

When pressing Add after validation of the protocol measurement, this measurement is included in the examination report.

In case of use without starting an examination, user can use protocol list to select the measurements and information to be stored with corresponding image.
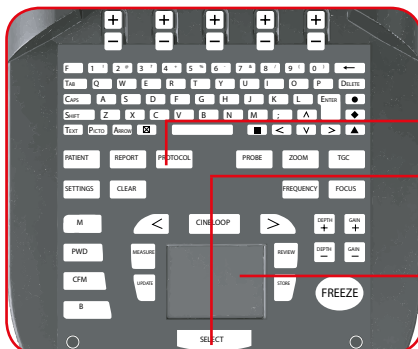
Freeze the image and use Cursor to scroll the protocol list

Access/Exit protocol menu

Click on select to initiate the first caliper on the image and return the previous caliper for adjustment.

Scroll the protocol menu using Touchpad. Validate the first caliper and activate the second caliper. Validate the measurement.

12.Report menu

The Report menu allows review of images, clips, reports from USB or internal system memory.

When no examination in progress

Export USB	Export selected data to external USB device.
View	Display selected items from the main menu list.
Rename	Rename selected data.
Delete	Delete selected data
Dicom store	Transfer of previously stored Dicom files to the Dicom server. Only possible when the images are stored in a patient report. Select the report and press Dicom server store.

When examination in progress

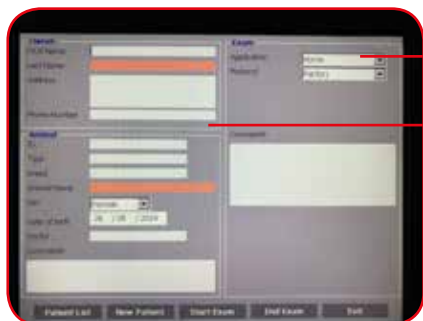| Page 1/ | Move to the next report image. |
| View | Display stored image from the current report |
| Directories | Return to Directories selection menu |
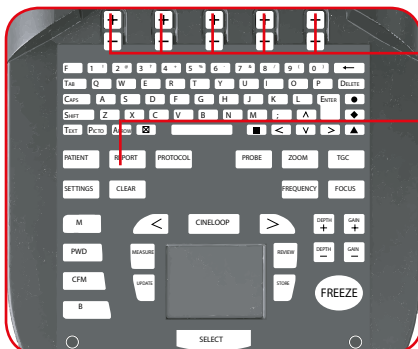
Keys to change settings of the menu.

Exit the menu, return to current examinations or see images and clips.

13.Patient menu

Access to the menu to review and store Patient data, examination information and Protocol selection.

Choose an application

Enter information about owner and patient

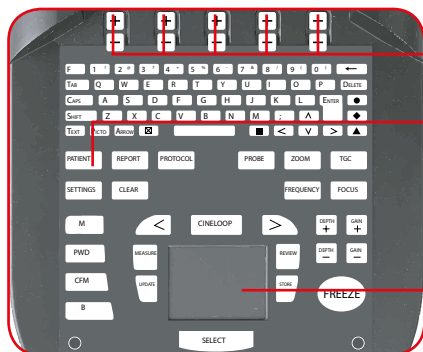|	
Patient List	Review/Store patient data, exams selection
New Patient	Create a patient. To validate patient press Exit
Start Exam	Start examination and open examination report
End Exam	Stop current examination and close report
Exit	Exit from patient menu

Keys to change settings of the menu.

Access/Exit Patient menu.

Click to select an existing patient.

14. Screen icons

An icon in the upper right part of the screen indicates the battery level. When battery goes down to 20% and 10%, low battery warning appears.

The icon in the lower right part of the screen indicates either the internal memory (marked Exago) or on a connected USB. If the indicator is red, the memory is full.
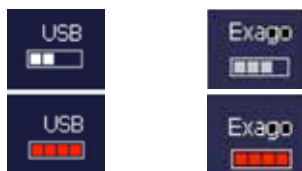
During storage of images or clips, the following icons are displayed on the screen according to a storage media:

 A downward arrow indicates a storage on the internal Exago memory.

 An upward arrow indicates storage on a USB stick.

 An arrow facing the right indicates storage of the Dicom server.

15. Cleaning and disinfection instructions

Cleaning and disinfection of the device

Before proceeding with any cleaning the equipment, check that the system is switched off and all electrical connections and peripherals are unplugged.

The following disinfection solutions have been tested and their compatibility with the components of the device has been proved:

• Cidex
• Cidex plus
• Cidex OPA

It is strongly recommended to use one of these solutions in order to avoid any deterioration during the cleaning and disinfection procedure.

The use of any other disinfecting solution than the ones indicated above is dangerous as it may damage the components of the device. Check the list of specified agents carefully.

In order to ensure proper cleaning and disinfection, please follow the following procedure:

1. Switch off and disconnect the device together with all connected peripherals.
2. After every patient examination, or as often as necessary, wipe the keyboard.
3. Clean all external surfaces with a clean cloth, dampened in a solution of mild soap and water. Switch off and disconnect the device together with all connected peripherals.

4. Remove any cleaning solution residue with a clean soft cloth damped in sterile water.

5. Air dry or dry with a soft, clean and dry cloth.

WARNING:
Do not use alcohol, or other strong chemicals agents that may damage the casings of the equipment. Do not pour or spray liquids directly on the equipment

!

Ultrasound coupling gel

Some ultrasound coupling gels and lotions can damage the probes.

Agents containing the following chemicals are known to damage transducers:
• Acetone
• Methanol
• Denatured ethyl alcohol
• Mineral oil
• Iodine
• Any lotion or gel that contains perfume

Check the gel contents with your gel supplier.

To avoid any problems regarding the use of ultrasound coupling gel; please respect the following rules:

• Always check the expiry date on the gel bottle prior to use on a patient. Throw expired bottles away.
• Before the probe disinfection procedure between each examination, wipe off all gel residues on probe head, housing and cable.

Cleaning and disinfection of probes

Probes are fragile and require careful handling and cleaning. Probe care includes daily inspections, cleaning and disinfections between each patient.

The following disinfection solutions have been tested and their compatibility with the components of the probes has been proved:

• Alkazyme
• Klenzyme
• Cidezyme
• Nu-Cidex
• Anioxyde
• Gigasept-FF
• Steranios
• Cidex OPA

It is strongly recommended to use one of these solutions in order to avoid any deterioration during the cleaning and disinfection procedure.

> **WARNING:**
> The use of any other disinfecting solution than the ones indicated above is dangerous as it may damage the probe components. Check the list of specified agents carefully

!

In order to ensure proper cleaning and disinfection, please follow the following procedure:

1. After every patient examination, wipe the ultrasound transmission gel off the probe.

2. Unplug the probe connector from the system.

3. Wipe the probe and cable with a clean soft cloth that has been damped in a solution of mild soap and water.

4. Remove any cleaning solution residue with a soft clean cloth damped in sterile water.

5. Dry with a clean and dry cloth.

Do not rub the probe with an abrasive sponge. Use a soft cloth or towel.

The following procedures are known to damage transducers. They can damage both the electrical safety features and the acoustic performance of the probes. Do not use the following procedures:

• Gas sterilization.
• Ultraviolet sterilization
• Dry heat sterilization
• Autoclaving
• Soaking a transducer in a chlorine bleach solution.

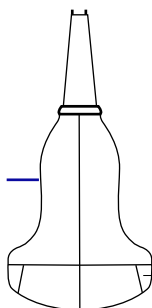# 16. Probe types and corresponding applications

Submerging Limits

During cleaning and disinfection of probes, take care of never exceeding the submerging limits indicated on the following figures.
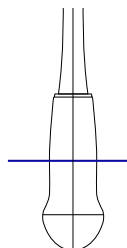
Probe C360A : Submerging limit in a fluid

Probe L738P: Submerging limit in a fluid

Probe C320A / C614P: Submerging limit in a fluid

Probe	Frequencies	Elements	Application
Linear (L738 V)	B mode: 5 to 10.0 MHz	128	Orthopaedics - tendons - small parts
Convex (C360 A)	B mode: 2.5 to 5.0 MHz	128	Abdominal for large & small animals
Convex (C320 A)	B mode : 2.0 to 5.0 MHz	128	Abdominal and cardiac, especially for small animals
Micro convex (C614 P)	B mode: 5 to 7.5 MHz	128	Abdominal and cardiac, especially for small animals
Linear rectal (LR760 V)	B mode: 5.0 to 10.0 MHz	128	Gynaecology and obstetric
OPU Probe (E610 A)	B mode: 5.0 to 7.5 MHz	128	Ovum Pick Up purpose on mares and cattle
Large Linear (L3130 B)	B mode : 2,5 to 5 MHz	128	Back fat & muscle & loin eye and IMF on pigs
Large Linear (L3180 B)	B mode : 2,5 to 5 MHz	128	Back fat & muscle & loin eye and IMF on cattle

17. Specifications

Size – 285mm(L) x 195mm(W) x 178mm(H)

Dimensions and Weight

* Depth: 30,6 cm
* Width: 26,5 cm
* Height: 7,1 cm
* Weight: 3,250 kg

Scanner operating frequency bands:

B1=2412MHz-2462MHz and B2=5150MHz-5250MHz. Maximum radio-frequency power transmitted in the frequency bands: 16.1dBm for B1 and 18dBm for B2.
To comply with ISED RSS-247, 5150-5250MHz bands are for indoor use only.

Electrical Power

* Works on removable interchangeable battery.
* Autonomy: 5.5 hours
* Battery recharging time: 3.5 hours
* External power supply Voltage: 100-240 V, 47-63 Hz Out Put: 120 W Max. 19V

Inputs and Outputs

* RJ 45
* Video Out: For external screen and thermal printer
* DVI connection
* USB port

Processing

* 32 true emission channels
* 64 reception channels
* Multi-zone focusing
* Continuous dynamic focusing in receive
* 256 shades of grey
* Evolutive hardware with firmware upgrade (FPGA)
* System boot up: 20 sec
* Probe switching (on trolley): 4-6 sec.

Monitor

* 8.4 inches TFT LCD
* VGA Format: - Display size: 640 x 480 - Recording area: 640 x 480
* Adjustable Tilt
* Stereo sound

Operating modes

* B mode • B/B mode (Dual B)
* M mode
* Color Flow Mapping (CFM) Velocity
* Pulsed Wave Doppler (PW)

> **Warning:**
> If the equipment is used in a manner not specified by the manufacturer, the protection provided by the equipment may be impaired.

18. Third party suppliers´ compatibility

Exago is compatible with third party suppliers:

BIOTRONICS : BioSoft Toolbox® for Swine

Introduced in 2009, BIOTRONICS is a fully-integrated set of image capturing and analysis software for live swine ultrasound images. Included within the software is a contemporary group database, with animal information captured at time of scanning plus all of the image measurements for backfat thickness, loin eye area or depth, and pork loin marbling. This software works with the Exago and its large probe (13 cm probe).

www.biotronics-inc.com

ECOTEXT : Testicular analysis software for all species

Developed by Humeco, ECOTEXT is a computer programme that studies testicular tissue through its macroscopic and microscopic video ultrasound. ECOTEXT is useful in predicting the reproductive capacity of young males before entering a center and also in evaluating testicular health in valuable breeders.

ECOTEXT has been developed for exclusive use of the EXAGO, with a 7.5 MHz linear rectal probe.

http://www.humeco.net/producto/ecotext

19. Service centres

Servicing must be done by **IMV imaging** authorised service centres.

Your equipment should be returned periodically to an **IMV imaging** service centre. Our qualified service engineers will use special test equipment to thoroughly check the instrument and advise of any work that appears to be necessary.

If your Exago requires servicing, please contact an official authorised service centre or the distributor in your country.

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Instruction manual

EXAGO

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