

# **Quick Card**

# Vivid S60 / S70

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### Touch Panel

Touch to select on the touch panel (1). Rotaries can be rotated or pressed to adjust parameters.

## On/Off button

#### To switch on the unit

Press the On/Off button (2) on the top left of the control panel.

After initialization the default scanning screen is displayed.

During the boot-up process the system may require the user to enter a password to operate it.

By factory Login default, the Operator ID is USR and there is no need to enter a password.

#### To switch off the system

Press the on/off button (2) on the top left of the control panel.

The Exit dialogue window is displayed. Select Shutdown. The shutdown process takes a few seconds and is completed when the color of the on/off button changes from green to amber.

## Active mode gain

Rotate (3) to adjust gain in the active mode (2D, M-Mode, Color, PW/CW, TVI).

### TGC screen activation

The sliders nearest the operator (4) affect the far field. TGC amplifies returning signals to correct for the attenuation caused by tissue at increasing depths.

## 2D Gain

When rotated clockwise (5), increases the overall gain applied to the received echo signals equally for all depth.

### Cursor

- 1. Press Cursor (7) on the control panel. A cursor line is displayed on the 2D image.
- 2. Select the cursor type on the Touch panel.
- 3. With the trackball (9.1) adjust the position of the cursor line.
- 4. Activate the desired mode.

## Auto (Auto-tissue, ASO)

Press Auto (6) on the Control panel to activate Automatic Optimizations (Auto Tissue/Automatic Spectrum Optimization).

Two Auto Tissue settings are available:

- Soft: optimizes the radial and lateral uniformity and brightness of the tissue continuously in real-time.
- Sharp: further enhances the image display by optimizing the gray scale curve.

The Auto Tissue (AT) setting (Soft or Sharp) can be turned on/off by pressing Auto on the Control panel. The last used setting is then applied. The Auto Tissue setting is preserved when switching to 2D duplex mode. The Auto Tissue settings are only available in live scanning and cannot be turned off when the image is stored.

Automatic Spectrum Optimization (ASO) is used to automatically adjust baseline and scale of the PW/CW spectrum to optimize the spectral display. It will avoid the display of a folded spectrum and stretch the spectrum vertically as large as possible. ASO optimization is not continuous but performed instantaneously each time Auto is pressed.

#### 2D

Press 2D (8.1) on the control panel to access 2D mode.

### M-Mode

- 1. To access M-Mode from any other scan mode, press MM (8.2) on the control panel.
- 2. Use the trackball (9.1) to position the cursor over the required area of the image.
- 3. Press Freeze (17).
- 4. Use the trackball to scroll through the data acquired.



### Color

- 1. From an optimized 2D image, press Color (8.3).
- 2. Use the trackball (9.1) (assigned function: Pos) to position the ROI frame over the area to be examined.
- 3. Press Set. The instruction Size should be highlighted in the trackball status bar.

NOTE: If the trackball control Pointer is selected, press Trackball to be able to select between Position and Size controls

Use the trackball to adjust the dimension of the ROI.

#### **PW**

- 1. Press PW (8.4). A scanning screen is displayed with a Doppler cursor on the 2D mode image and a Doppler spectrum in the lower part of the screen.
- 2. Use the trackball (9.1) to position the sample volume location over the area of interest.
- 3. In PW, adjust the Sample Volume.

NOTE: Sample Volume adjustment may affect the Scale, Frame rate and LV rej. settings.

NOTE: Adjustment of the Sample volume may affect the PRF (Nyquist limit) settings.

#### **CW**

- Press CW (8.5). A scanning screen is displayed with a Doppler cursor on the 2D mode image and a Doppler spectrum in the lower part of the screen.
- 2. Use the trackball (9.1) to position the Doppler cursor line over the area of interest.

## Tissue Velocity Imaging (TVI)

- 1. While in 2D mode press TVI (8.6) on the control panel.
- 2. Use the trackball (9.1) (assigned function: Pos) to position the ROI frame over the area to be examined.
- 3. Press Set. The instruction Size should be highlighted in the trackball status bar.
  - NOTE: If the trackball control Pointer is selected, press Set to be able to select between Position and Size controls.
- 4. Use the trackball to adjust the dimension of the ROI.

### Trackball and related buttons

Select keys (9.2):

- Angle: Sets the cut-planes and crop planes to predefined positions.
- 2. Pos: Adjusts the ROI position

Update/Menu Key (9.3):

In Freeze: displays a pop-up System menu.

In Live duplex mode (Doppler or M-mode): toggles Live/Freeze between the 2D image and the spectrum image.

Trackball Key (9.4):

- 1. Scroll: scroll through the progress bar to watch the cine loop frame by frame
- 2. Angle/Pos
- 3. Ptr: mouse left key

Upper key (9.5):

Configurable as either a select key, a pointer, an Image store button, or an Image cursor.

To set the function:

- 1. Press Utility/Config on the Touch panel
- 2. Select Imaging/Global

#### **4D Control**

- 1. Enter 4D by pressing the 4D button (10) on the control panel. The volume acquisition is started.
- Adjust the desired parameters on the touch panel.

### Multi D Control

- 1. Press Multi-D (10) on the control panel NOTE: The Bi-plane screen is displayed.
- 2. Press Tri-plane or Bi-plane on the touch panel to activate the corresponding mode.

## Loudspeaker volume control

Rotate (11) to adjust the volume level of the integrated speakers.



#### Zoom

#### **Display zoom**

- Rotate the Zoom knob clockwise (13). The resulting magnified image appears in the acquisition window.
   An un-magnified image is displayed in the right corner showing the outlined zoomed region.
- 2. Use the trackball (9.1) to position the zoom area over the desired portion of the image.
- To turn off the Display zoom, rotate the Zoom knob counter clockwise.

#### **High Resolution zoom**

- 1. Press the Zoom knob (13).
- 2. Use the trackball (9.1) to position the zoom area over the desired portion of the image.
- 3. Increase size as desired by turning the Zoom knob clockwise.
- 4. Press Zoom one more time to turn off the HR zoom.

### Clear

Press Clear (14) on the control panel. The text annotation is erased. If text annotation contains a yellow portion, typed previously, and a green portion which is the currently typed text, the first press on Clear erases green text. A second press erases the yellow text.

## Depth

Rotating the depth knob (15) sets the maximum (far field) distance that will be imaged. Decreasing the depth may allow higher frame rates.

## P1 (Print, Capture)

To print an image:

1. Press P1 (16) on the Control panel.

The image displayed on the screen is printed on the printer, depending on the key assignment configuration.

#### P1 button configuration:

NOTE: The P1 button on the Control panel can be configured to perform several actions (e.g. Video Print, Laser print, DICOM storage...etc.).

- 1. Press Utility/Config on the Touch panel
- 2. Select the Connectivity category and Additional outputs subgroup
- 3. In Button field select P1
- Select an output device in the Available output field and press the Right arrow button to assign the device to the selected button
- 5. Adjust the device specific parameters and select OK
- 6. Adjust the image specific parameters

#### Freeze & 2D Freeze

- Press Freeze (17).
   The left and right markers are displayed on either side of the last detected heart cycle on the ECG trace.
- Press 2D
   The selected heart beat is played back.
- 3. Press 2D to freeze the cineloop.
- 4. Use the trackball to scroll through the acquisition and find the sequence of interest.
- 5. Adjust Cycle Select and Num Cycles on the touch panel.
- 6. In Freeze, press Set left or Set right to set the corresponding cineloop boundary to the current frame.
- 7. Adjust Left marker and Right marker to trim or expand the cineloop boundaries.
- 8. Press 2D to run the cineloop and Store to store the cineloop or Freeze to return to live scanning.

NOTE: Cineloop storage can be configured to store heart cycles with additional time before and after the R-wave and to display a preview before storage ('Global imaging settings')



#### Measure

1. Press Measure (18) on the control panel. The Measurement menu is displayed, showing the measurement category for the current application.

To change Measurement category:

 Select the heading in the Measurement menu and choose another category.

NOTE: This can also be done from the Touch panel.

To perform measurements from a study:

- 1. Select the study (folder) in the Measurement menu. NOTE: This can also be done from the Touch panel.
- Perform the measurement. Follow the instructions displayed on screen

## Caliper

- 1. Press Caliper (18) on the Control panel and select the desired measurement tool.
- 2. Perform the measurement. Follow the instructions displayed on screen.

#### Store

#### Storing an image:

- . While scanning in any mode, press Freeze.
- 2. With the trackball, scroll through the cineloop and select the required image.
- 3. Press Store (19)

#### Storing a cineloop:

- 1. While scanning, press Store.
- 2. If desired, select and adjust the cineloop to store using the cineloop controls on the touch panel.
- 3. Press Store (19) to save the cineloop.

NOTE: The system can be configured to perform either
• Retrospective storage: while scanning press Store to

• Retrospective storage: while scanning press Store to store

the last elapsed defined number of cycles/seconds.

 Prospective storage: while scanning press Store to start storage of the forthcoming defined number of cycles/ seconds.

The user can also configure the system to preview the cineloop before storage or save the cineloop directly. To configure the cineloop storage go to 'Global imaging settings'.

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