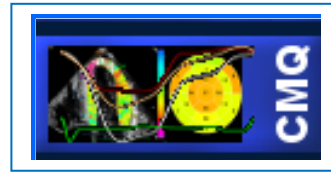


# Philips iE33



## Quick Guide – QLAB 9 Cardiac Motion/Mechanics Quantification (CMQ)

### Overview / Introduction

#### What is CMQ?

The CMQ 9 provides a robust and objective assessment of left ventricle global function and regional wall motion, deformation and timing using 2D speckle tracking technology.

#### What is the benefit of CMQ?

CMQ allows the user to extract a wide range of myocardial motion parameters from stored data sets, facilitating quality assurance, collaborative clinical decision making, and case reviews without need for repeat exams.

### Launching Images in QLAB

The user has the ability to load multiple native data images.

1. Locate and select preferred images from:
  - Current or saved exam
  - iE33 System Review
  - Off-Cart QLAB
  - Q-Station
  - Xcelera
  - Or any supported PACS or workstation.
2. Select QLAB on cart or off-cart; and then select CMQ.

### Setting the Region of Interest (ROI)

1. Under the **ROI** tab, confirm that the displayed image matches the highlighted template.

**Note:** If images are acquired using a SmartExam protocol, selected images will be automatically associated with the appropriate ROI template in CMQ.
2. To activate the LV apical ROI:
  - a. Set the annular ROI points low and inside the myocardium at the level of the insertion points of the mitral valve.
  - b. Set the apical ROI point at the endocardial border of the apex.

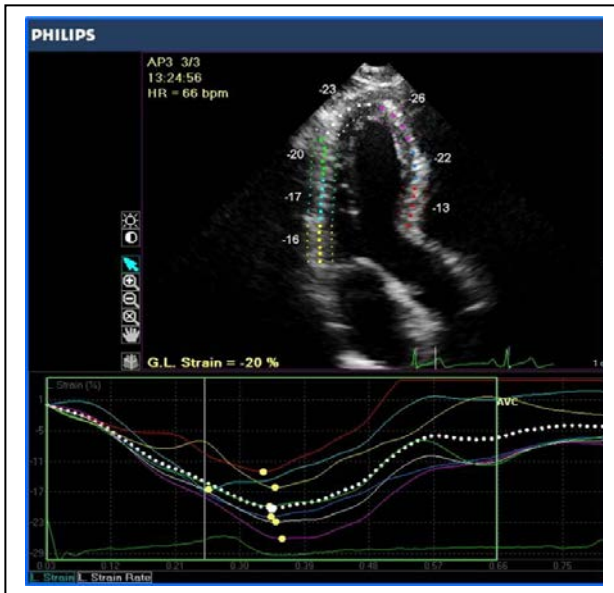
**Note:** The LV short axis ROI is automatically activated.
3. Press spacebar to play loop and verify border tracking. If a wall segment did not display due to poor tracking, right click to display. Right click again to remove.
4. Repeat steps for the remaining views. All 17 segments must be quantified to obtain a complete bull's eye diagram.

## Setting Aortic Valve Closure (AVC) Time

If needed, the user can set the R-AVC time in CMQ.

- Confirm that the displayed image matches the highlighted template button.
- Press the keyboard arrows to advance the loop to aortic valve closure (end systole).
- Click **Set AVC Time**. R to AVC value is populated into CMQ Cardiac Phases box.

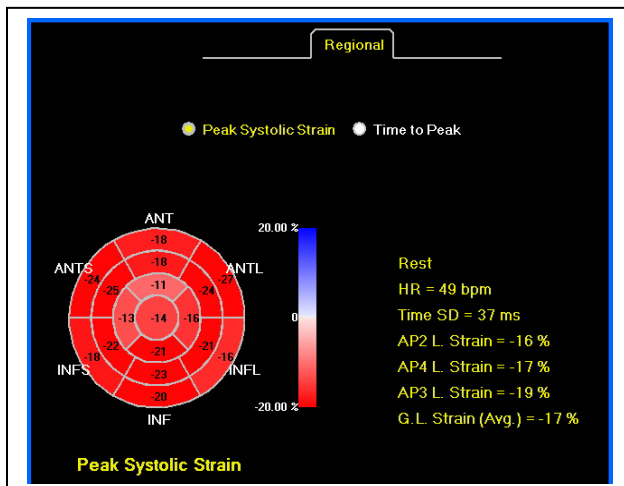
## View Results Displays



- Border tracking display shows both segment labels and values of the view.
- Global Longitudinal Strain is displayed for the current view.
- Click on a tab in the lower left region of the waveform area (ex: L. Strain or Strain Rate) to view segmental results.
- Hover over each waveform to display a segment's parameter information.
- The white dotted waveform is the global function curve.

## Global Results Displays

The **Global Results** tab contains segmental and global values for all 17 segments.



- Select **Peak Systolic Strain** or **Time to Peak** to display results.
- Configure the Bull's Eye display color (red-blue or green-red) in **Preferences**.
- Press **Export** or **Acquire** to capture the Bull's Eye results page.
- **DICOM** captures of this page can be sent to the iE33 and exported.