



PHILIPS

QLAB 10.8

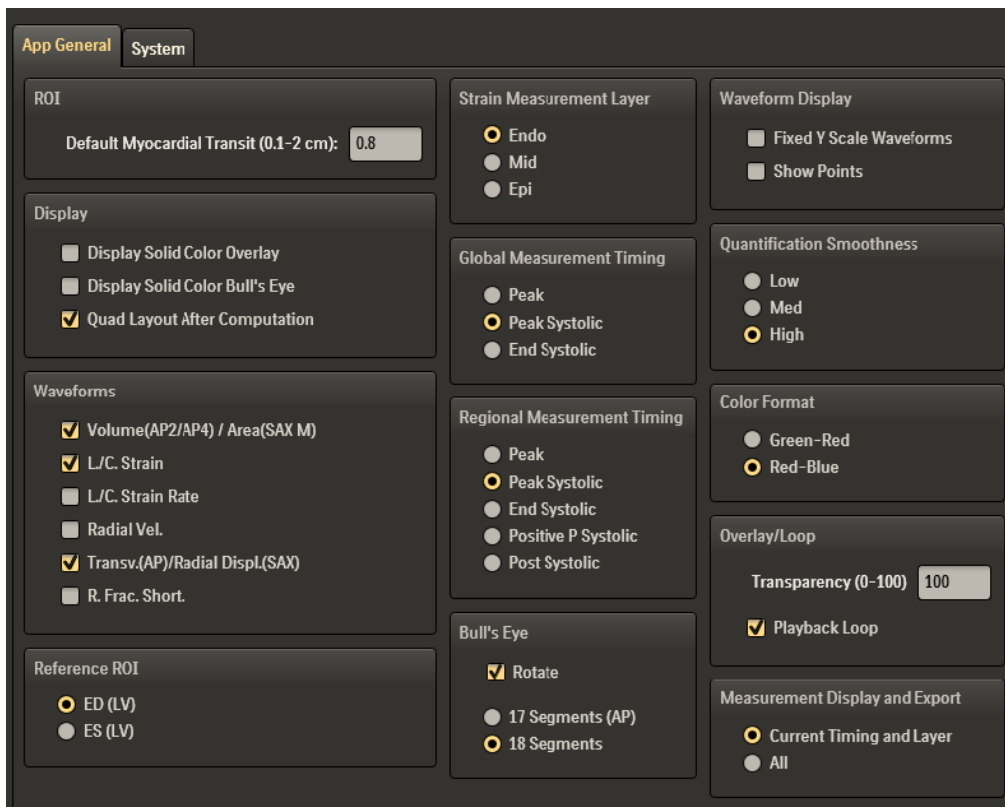
aCMQ quick guide

Philips' aCMQ has been updated to align with the speckle taskforce recommendations and improve the global and regional strain performance. The new workflow is required for best practice.

Preferences

1. Open the QLAB preferences.
2. Select from the new strain measurement options.

The settings below are recommended based on feedback from clinical experts.

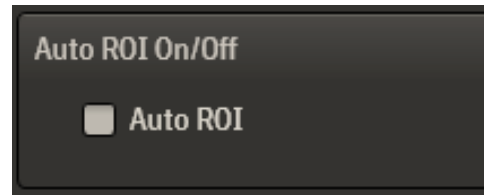


The screenshot shows the 'App General' tab of the QLAB preferences window. The settings are organized into several sections:

- ROI:** Default Myocardial Transit (0.1-2 cm): 0.8
- Display:**
 - Display Solid Color Overlay
 - Display Solid Color Bull's Eye
 - Quad Layout After Computation
- Waveforms:**
 - Volume(AP2/AP4) / Area(SAX M)
 - L/C. Strain
 - L/C. Strain Rate
 - Radial Vel.
 - Transv.(AP)/Radial Displ.(SAX)
 - R. Frac. Short.
- Reference ROI:**
 - ED (LV)
 - ES (LV)
- Strain Measurement Layer:**
 - Endo
 - Mid
 - Epi
- Global Measurement Timing:**
 - Peak
 - Peak Systolic
 - End Systolic
- Regional Measurement Timing:**
 - Peak
 - Peak Systolic
 - End Systolic
 - Positive P Systolic
 - Post Systolic
- Bull's Eye:**
 - Rotate
 - 17 Segments (AP)
 - 18 Segments
- Waveform Display:**
 - Fixed Y Scale Waveforms
 - Show Points
- Quantification Smoothness:**
 - Low
 - Med
 - High
- Color Format:**
 - Green-Red
 - Red-Blue
- Overlay/Loop:**
 - Transparency (0-100): 100
 - Playback Loop
- Measurement Display and Export:**
 - Current Timing and Layer
 - All

Auto ROI checkbox

The Auto ROI checkbox (software update available in early 2018) enables or disables the Auto ROI. The Auto ROI preference is off (unchecked) by default.



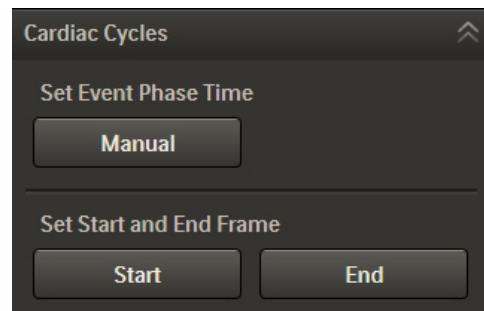
Non-native data and non-ECG

When ECG information is not available, the cardiac cycle can be manually defined.

Edit ED and Edit ES

1. Find the ED (End Diastole) frame and then click **Start**.
2. Locate the next ED frame and click **End** to identify the End Frame.

Note: Native data must be used for images with 2D Chroma when using aCMQ off-cart (standalone or PACS).



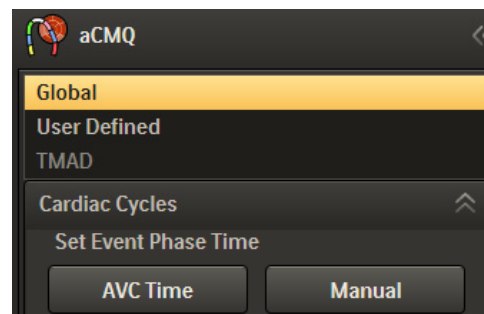
Confirm AVC

AVC can be performed in 3 ways -- Direct Ao valve Doppler measurement (R to AVC), Automatically with time to minimal systolic volume from LV AP3 View or manually placed utilizing visual closure of the aortic valve.

Edit or adjust AVC

Edit or adjust AVC from the left menu by selecting **Cardiac Cycles**.

The AVC Time button allows manual adjustment of AVC and should be confirmed with visual assessment of AVC. The Manual button allows direct values to be edited.



aCMQ workflow

Select images

Select the LV AP3, LV AP2, and LV AP4 chamber views and launch the aCMQ app.

Note: It is recommended to have less than a 10% difference in heart rate between the 2D loops when calculating Peak Systolic and End Systolic GLS.

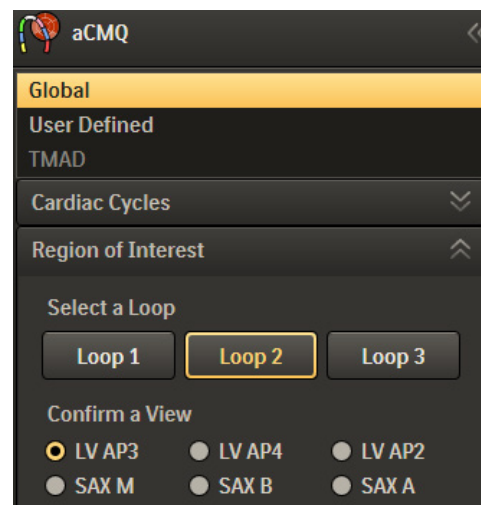
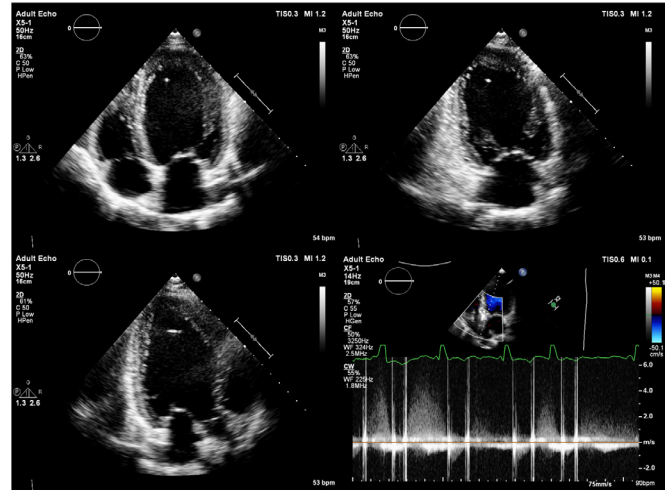
Select loop & confirm view

Select the loop associated with the LV AP3 and confirm by selecting LV AP3. (If utilizing a SmartExam, this step is automated.)

If Auto ROI is enabled (checked), then points will be placed automatically.

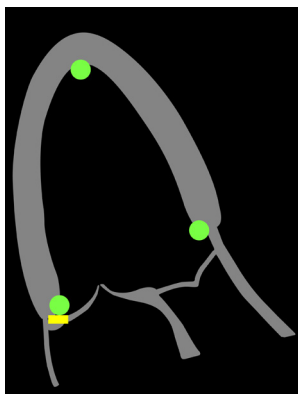
Selecting draw (recommended method) allows users to place the basal and apical points resulting in a Manual ROI.

Note: Always analyze the LV AP3 view first.



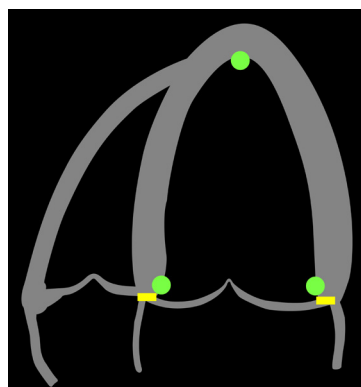
Reference point placement

Accurate placement of the reference points is important to obtain accurate quantification.



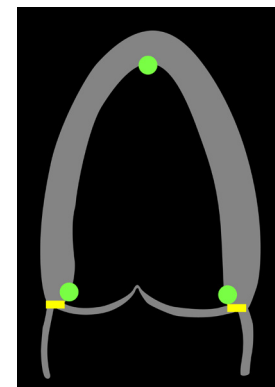
AP3

Place the reference points on the blood pool / tissue border at the mitral valve leaflet insertion, the LVOT and the apex.



AP4

Place the reference points on the blood pool / tissue border at the left and right mitral valve leaflet insertion, and the apex.



AP2

Place the reference points on the blood pool / tissue border at the left and right mitral valve leaflet insertion, and the apex.

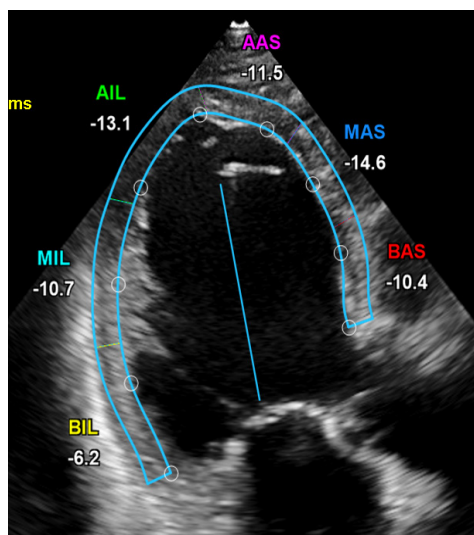
Edit ED and Edit ES

Edit ED (End Diastole) and Edit ES (End Systole) allow the user to confirm placement of the ROI over the underlying tissue matching the inside edge of the ROI to the blood tissue interface.

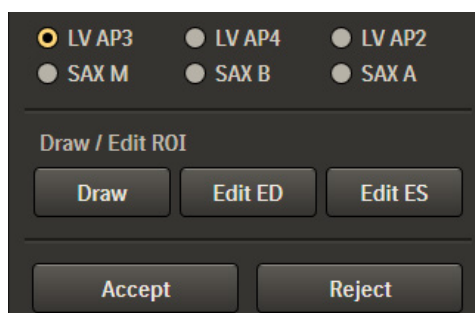
Click **Edit ED** and confirm the placement of the annular and apical points. Edit if needed.
Click **Edit ES** and confirm the placement of the annular and apical points. Edit if needed.

Click **Accept** to confirm results.

Complete aCMQ by performing the steps above on the LV AP4 and LV AP2.



Edit ED



Review results and display

Review the results and display for all the apical views in the 4-up display as seen using the AP3.

