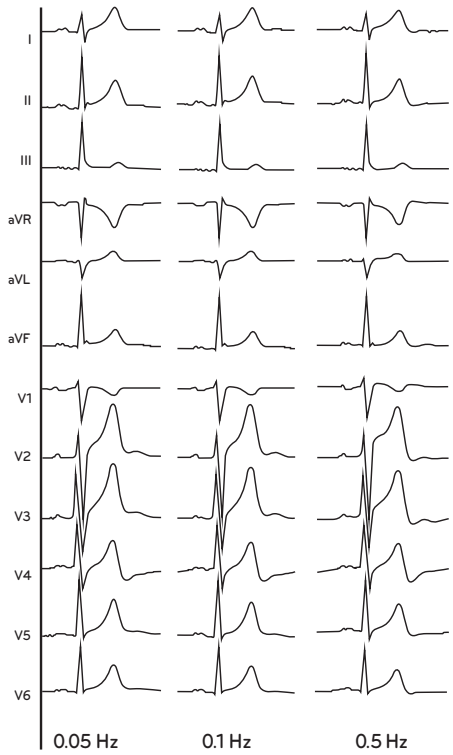
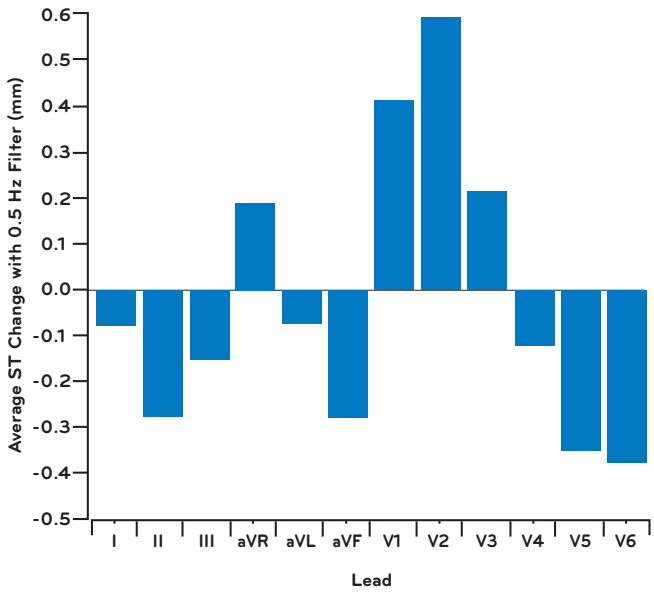
Baseline Filters and Diagnostic Quality ECG

EXAMPLE ECG DEMONSTRATING POSSIBLE IMPACT OF NON-DIAGNOSTIC FILTERS ON ST SEGMENTS



NON-DIAGNOSTIC BASELINE FILTERS DISTORT THE ST SEGMENT*



*Based on a pool of 20 healthy subjects, upon whom an ECG at each filter setting (.05 Hz and 0.5 Hz) was performed.

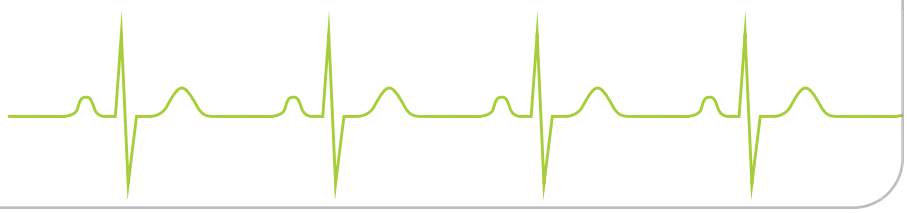
NON-DIAGNOSTIC FILTERS CONFOUND THE DETECTION OF STEMI

QRS Type	ST Segment Impact from Non-Diagnostic Baseline Filter
"Positive" QRS (e.g. I, II, aVF, V5-6) 	 Causes ST segment depression or masks ST segment elevation (possible miss of inferior or lateral infarction).
"Negative" QRS (e.g. V1-V2) 	 Causes ST segment elevation or masks ST segment depression (possible false positive septal infarction or miss of posterior infarction).

WHICH IS WHY MORTARA DEVICES ARE FIXED AT 0.05 HZ

Diagnostic bandwidth is more sensitive to baseline wander. But more importantly, it has greater sensitivity to actual ST Segment deviations.

Mortara



From H. Burri et al. "simulation of anteroseptal myocardial infarction by electrocardiographic filters", *Journal of Electrocardiology 39 (2006) 253-258*

Ref: 9513-000-09-ENG Rev 1