

12-Lead Placement Resting Electrodes

RA: Second intercostal space lateral right side

LA: Second intercostal space lateral left side

LL: Lower left lateral chest or left leg

RL: Lower right lateral chest or right leg

V1: Fourth intercostal space to the right of the sternum

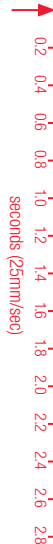
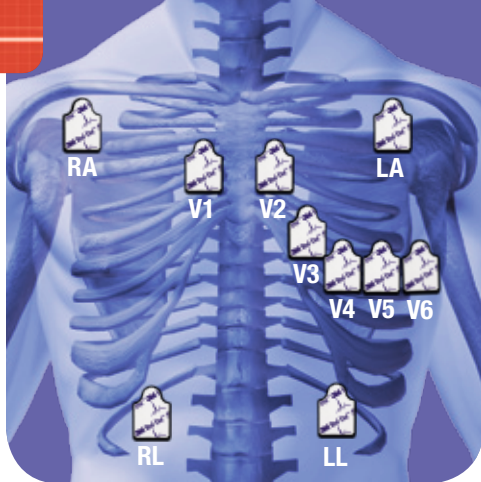
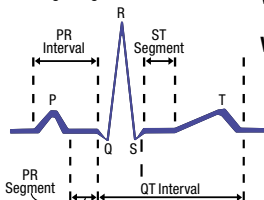
V2: Fourth intercostal space to the left of the sternum

V3: Between V2 and V4

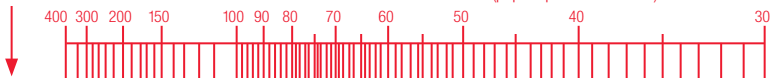
V4: Fifth intercostal space along the mid-clavicular line

V5: Fifth intercostal space between V4 and V6

V6: Fifth intercostal space along the mid-axillary line

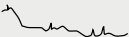






HEART RATE reads two QRS intervals from arrow (paper speed 25mm/sec)



Troubleshooting ECG Traces

Troubleshoot each artifact in order, starting with **1**

Artifacts	Skin Impedance	Muscle Movement	Electrical Continuity	Electrodes	Cabling	Interference	Equipment
No Base Line			2 Check all connections/ perform continuity check	4 Check for dry-out	3 Check for proper cable		1 Check lead switch and ECG machine set-up
Base Line Wander 	3 Abrade skin	1 Stop patient movement	2 Check ground connections	4 Use same type of electrode at all sites	6 Check for proper cable	5 Check for static build-up	
AC Noise 	3 Abrade skin	6 May be untreatable involuntary muscle tremor	1 Check ground connections	5 Check for dry-out	7 May need fully shielded cable and lead wires	2 Keep cable away from AC cord	4 Turn off fluorescent lights and/or other equipment
Intermittent Signal 			1 Check for loose connections	2 Check for loose electrode or dry-out	4 Perform continuity check	3 Check for static build-up	
Motion Artifact 	2 Abrade skin	1 Move electrodes off muscle mass	3 Check for loose connections	4 Check for loose electrode or dry-out	7 Perform continuity check	5 Turn off fluorescent lights and/or other equipment	6 Check for proper EKG machine set-up
Low Amplitude 	3 Abrade skin		1 Check all connections	4 Check for dry-out		5 Turn off radio, TV and/or other equipment	2 Check gain settings

