

# Recording a 12-Lead Diagnostic ECG (D-ECG)

## **Device and Patient Preparation**

- 1. Ensure C3T is powered on.
- 2. Remove excess hair on the thorax so the conductive surface of the electrodes has full contact with the skin.
- 3. If necessary, clean the skin before applying the electrodes.
- 4. Ensure the skin is completely dry.
- 5. Attach the ECG electrodes to the ECG monitoring cables.
- 6. Apply electrodes as per the recommended positioning below.
- Do not use expired electrodes.
- Store electrodes in the packaging to avoid the drying out of conductive gel.
- The ECG function is compromised if adhesion of the electrodes is impaired due to excessive hair or contaminated skin.

## **Electrode Placement for D-ECG**

The placement of the 4 limb electrodes and 6 chest lead electrodes are displayed in the diagrams below.

Limb Leads Chest Leads

Note that when a 12-Lead diagnostic ECG is being recorded **the limb leads should only be placed on the limbs, not on the thorax** (in the shortened position) which is only used for monitoring purposes.





## **Recording a Diagnostic ECG**

1. When you are ready to begin recording the ECG, if possible, ask the patient to lie still and hold their breath for 10 seconds whilst the ECG is being obtained.



- **3.** Ensure that the filter and amplitude are set appropriately.
  - To change the filter setting press the softkey [Filter] to switch between a low pass filter of 40Hz and 150Hz.
  - To adjust the amplitude, use the softkeys [Ampl+] and [Ampl-].

## It is advised to use the 150Hz filter for diagnostic ECGs.





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### 4. Check the preview.

Ensure that all ECG leads are displayed, and the signal quality of the leads is acceptable.

If the signal quality of any lead is poor, check electrode contact and electrode positioning.

5. When the message **"Ready for D-ECG"** appears, press the softkey **[Start].** The ECG recorded up to this moment is saved.



### 6. Enter patient details.

A patient data window will appear. Enter the details of the patient, if known, by using the jog dial to select each data field and the on-screen keyboard to enter text.

If the patient's age and sex are not entered, the device will assume a male patient, age 50. This may affect the ECG interpretation.





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### 7. Print the D-ECG.

When the screen reads **"D-ECG measured"**, you may use the softkey **[Print]** to print out the diagnostic ECG, and/or **[Send]** to send the ECG to a configured destination.

If you wish to run another D-ECG, select the softkey [Cont.].



For more information on sending diagnostic ECGs, see the Quick Guide **"Sending D-ECGs**" or the **C3T User Manual**.

