

**Median Sensory (Antidromic)*****Electromyograph Instrument Parameters:***

Filter Settings/Frequency Response: 20 Hz - 2,000 Hz  
Sweep Speed: 1 - 2 milliseconds/Division  
Sensitivity/Gain: 5 - 20 microvolts/Division

***Patient Position:*** (Illustration 4) The patient is positioned supine with arm abducted approximately 45 degrees. The forearm is fully supinated, the wrist is in a neutral position. The fingers may flex slightly when in a relaxed, "resting" position.

***Electrode Placement:*** (Illustration 4)

***Active (Recording) Electrode:*** The active recording electrode is attached to the index finger at the midpoint of the distance between the phalangeal flexion crease and the web space of the index finger so that a distance of not less than 10 cm, but not more than 14 cm distance is maintained between the stimulating electrode and the active electrode.

***Reference Electrode:*** The reference electrode is positioned at or about the distal interphalangeal flexion crease of the index finger so that a distance of at least 3 cm is maintained between the active and reference electrode.

***Ground Electrode:*** The ground should be positioned on the dorsum of the hand between the active and stimulating electrodes.

***Electrostimulation:*** (Illustration 4)

Percutaneous electrostimulation is performed as follows:

Stimulation is performed at the wrist between the flexor digitorum sublimis and flexor carpi radialis tendons proximal to the transverse carpal ligament.

***TECHNICAL COMMENTS:***

A low stimulation intensity is usually adequate to elicit the antidromic sensory response.

Motor response and volume conduction effects may be lessened by decreasing electrostimulation intensity and/or decreasing pulse width duration of the applied electrostimulation. (NOTE: Motor responses from hand muscles and volume conduction are more of a technical problem when utilizing antidromic techniques than when using orthodromic techniques.)

***Special Concern:*** Care must be taken to maintain a separation between the active and reference electrodes on the index finger. Do not allow conducting gel to bridge this interelectrode space.

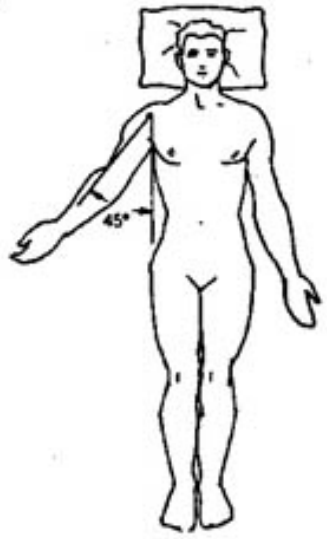
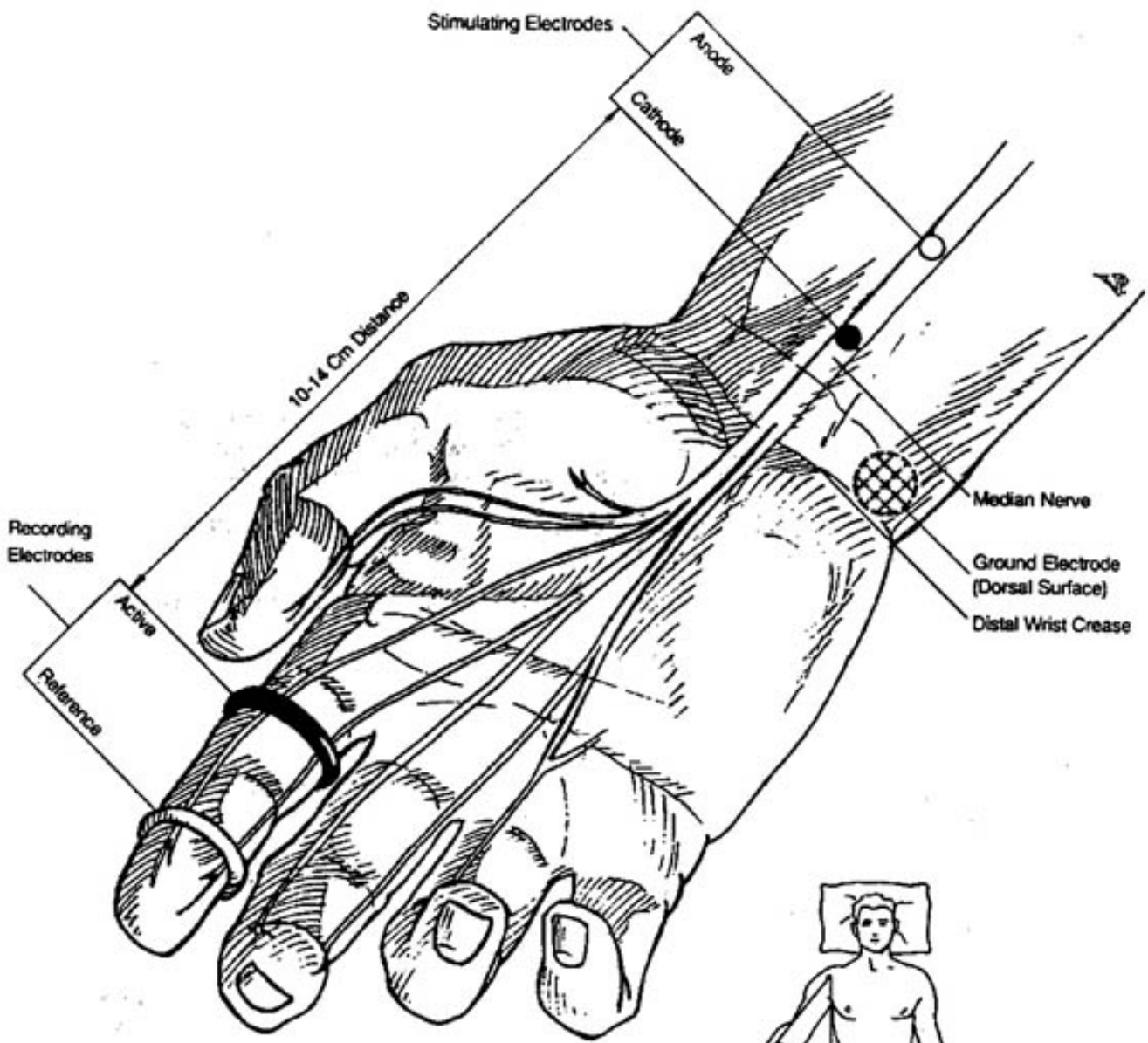


ILLUSTRATION 4