SPN-304 Spirometer

Overview

The SPN-304 flow spirometer measures volumes and flows from normal breathing.

The SPN-304 Flow spirometer consists of three parts:

An electronic sensor and amplifier

A disposable or reusable flow head

Polyethylene tubing used to attach the flow head to the sensor

The spirometer unit contains a differential air pressure sensor that measures the difference in air pressure between the front and rear sides of the mesh screen in the flow head. When the spirometer is assembled, blowing into the mouthpiece will produce a measurable pressure difference across the screen in the flow head. The sensor will produce a voltage, which is directly proportional to the pressure. It is this voltage that is recorded.

The SPN-304 has 2 modes of operation, the Spirometery mode and Heart Sounds mode. when placed in the Heart Sounds (HS) mode it can also be used wih the HSMN-300 to record Heart Sounds.

Photo

Specifications:

Specifications	
Conector	Mini-DIN7
power	+/- 5V
pressure difference range	+/- 10 cm H2O
sensitivity	26.4mmHg/V

Operating Instructions:

The SPN-304 has 2 modes of operation, the Spirometer Mode (SP) and the Heart Sounds Mode (HS).

Spirometer Mode

Place the SPN-304 in the spirometer mode, using the switch.

Connect the flowhead to the spirometer usingthe included tubing. Be sure to allow 15 minutes after you plug the spirometer in to warm up. After the warm-up period, when you blow into the mouthpiece you should see the air-flow trace move up or down.

The spirometer has an output of about 1Volt for 26.4 mmH2O pressure difference.

Heart Sounds Mode

Place the SPN-304 in the HeartSounds mode, using the switch.

Connect the HSMN-304 to the white connector of the SPN-304. Optionally, Plug the Red input of the SPN-304 using the RED blocking cap.