

Recognition of Connector Type

Six (6) pin MS vs. Six (6) pin AAMI



Mechanical: Six pins located equally spaced within a protective ½" circle rim that includes a keying slot. The pin nomenclature is not visible from the front thus the differentiation is whether the key is 'at the pin' or between two pins.

Six (6) pin MS: This connector was originally (1967 to 1975) used as an ECG input connector because it is a rugged Mil Spec connector that was readily available and provided enough pins for all 5 (patient) lead wires and the shield. **The keying slot is located directly over pin A.** More recently, this connector is used for IBP (internal blood pressure) transducer inputs.

Six (6) pin AAMI: In 1975, a federal sub committee was convened by the department of transportation to establish standards for funding a concept 'Emergency Medical Services' whereby an ambulance could cross the USA and be able to bring a patient to any hospital for treatment. Part of this standard included the ECG input connector used in EMS telemetry and defibrillator units.

The 6 pin MS connector was recognized as the best choice however to equalize the impact on manufacturers currently using this connector, a variation was chosen.

The 6 pin MS was keyed directly over pin A so the committee asked Cannon (manufacturer) to make a version of the connector that was keyed 30 degrees behind pin A or half-way between pins A and F. To keep the new connector from being a Federal standard (hard to change), AAMI (Association for the Advancement of Medical Instrumentation) was asked to endorse it as a preferred ECG input connector. Thus **the AAMI standard 6 pin connector is keyed 30 degrees behind pin A or half-way between pins A and F.**

Note: ECG devices with "automated" 12 lead capability now use various ECG input connectors having a minimum of eleven (11) pins to accommodate all 10 lead wires plus the shield. No standard exists for these connectors other than those established by and for individual device manufacturers.