



Figure 3.9 Schematic diagram attenuator section

- Detailed circuit description

See figure 3.7 and circuit diagram A2a (figure 10.4).

Input coupling

The incoming signal first passes the AC/DC coupling section (C2202). When relay K2201 is opened, the signal is AC coupled via C2202.

H.F. (high frequency) path

After the coupling section, the L.F. part of the signal is blocked by capacitor C2203. Only the H.F. part of the input signal enters the H.F. attenuator. This is a triple capacitive divider, consisting of a 1 to 100, a 1 to 10, and a 1 to 1.48 divider.

The 1 to 1.48 divider section is switched on when relay switches K2202 and K2203 are in the "upper" position (as shown on circuit diagram A2a, figure 10.5).

The 1 to 1.48 divider consists of C2203 and C2209 in parallel with some parasitic capacitors. The attenuation of 1.48 times in this straight-on path is compensated for later in the circuitry.

The separate sections are switched in the signal path, depending on the attenuation required:

Table 3.2 Sections used in various attenuator settings

Attenuator Settings	Sections Used	Attenuation
5 mV/div 100 mV/div	1.48x	1.48 times
200 mV/div 1 V/div	1.48x, 10x	14.8 times
2 V/div 10 V/div	1.48x, 100x	148 times
20 V/div 100 V/div	1.48x, 10x, 100x	1480 times