

Without calibrated attenuator line, such measurements are made by increasing the output of the noise generator until the IF noise level reading has increased by a factor of $\sqrt{2}$, or **with calibrated attenuator line**, the measurements are made by increasing the attenuation setting of the attenuator line by 3 dB and then restoring the former IF noise level reading by increasing the output level of the noise generator.

At each measuring frequency, make sure that the corresponding F_{Receiver} and $F_{V\ 1275 + \text{Receiver}}$ are measured with the same RF gain setting of the receiver, i.e. in the same setting of the manual RF gain control.

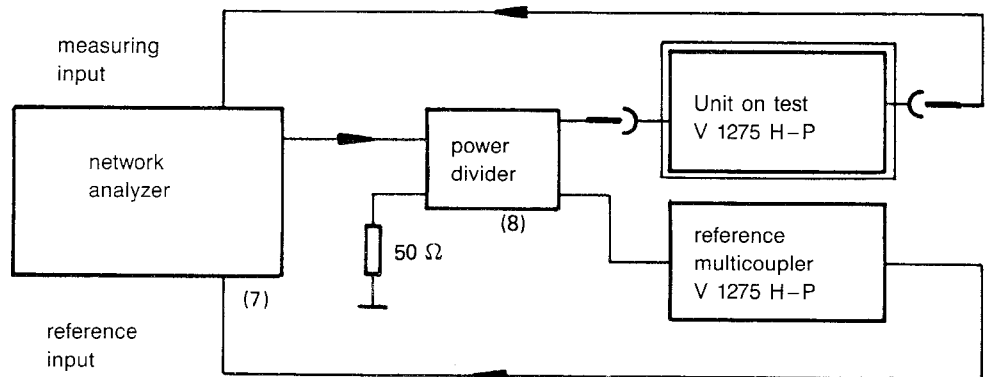
If the manual gain control of the receiver is turned up too far, then limiting of the noise peaks may result, whereupon the obtained kT_0 readings will turn out too large. Such measuring errors should be avoided by making several sensitivity measurements at different manual RF gain control settings with the cascaded combination of antenna multicoupler and receiver, thereby noting those gain control settings between which the smallest kT_0 values are obtained.

4.4.4.4 Aligning the High-Pass and Low-Pass Filter (Annex 5, Sheet 2)

The attenuation factor (insertion loss) of the filter should be less than 1 dB in the passband (1.5 to 30 MHz), and greater than 40 dB in the stop bands (up to 1.2 MHz and above 40 MHz). If these performance figures are not achieved, then L-realignment of the filter pole circuits is necessary in the factory.

4.4.4.5 Measuring the phase response and gain as a function of frequency (for V 1275 H-P)

Measuring set-up:



If the cause of a fault in the direction finder system is suspected to lie in an antenna multicoupler, then the frequency and phase responses of the individual multicouplers must be compared. The RF output power of the network analyzer (7) is divided to two identical branches (8). One antenna multicoupler is selected as reference unit and connected to one branch and the other antenna multicouplers are successively connected to the other branch. One output of the antenna multicouplers each is connected to the reference input and to the measuring input of the network analyzer. Throughout the frequency range from 1.5 MHz to 30 MHz, the amplitude discrepancy must not exceed 0.5 dB and the phase discrepancy must not exceed 3°.