5-4 Manual notch

The IC-756PROII manual notch filter has extremely sharp characteristics which can be provided only by DSP processing. Since this manual notch is processed within the AGC loop even powerful beats are cut-off sharply without any influence upon the AGC. The filter characteristics are sharp and the passband width is held to approximately 50Hz with an attenuation level of over 70dB. This makes it possible to adjust the notch point accurately. Only the DSP provides the characteristics as shown above.

With an analog type notch filter (crystal or LC notch filter) it is not possible to adjust the notch point characteristics accurately as shown above, as the frequency characteristics are liable to deviate. The manual notch assures stable filter characteristics by DSP processing because of its extremely sharp characteristics and the high-stability reference oscillator provides superior frequency stability.

Accordingly it provides stable operation such that it is not necessary to re-adjust the notch point, provided the beat signal is not moved once it is set.

![Characteristics of manual notch](image1)

![Characteristics of manual notch (enlarged view)](image2)