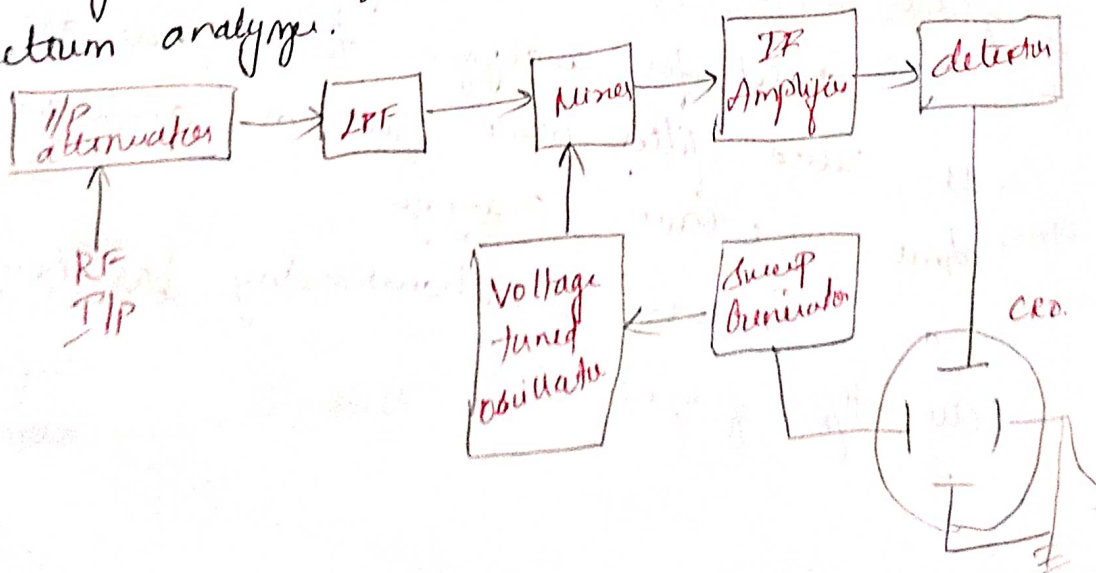


Working:-

- It has a set of band pass filters and each one is designed for allowing a specific band of frequency.
- The output of each band pass filter is given to a corresponding detector.
- All the detectors are connected to electronic switch.
- This switch allows the detector outputs sequentially to the vertical deflection plate of CRO.
- CRO displays frequency spectrum of AP signal on its CRT screen.

Superhetrodyne Spectrum analyzer:

The Spectrum analyzer, used for analysing the signals are of RF range is called Superhetrodyne spectrum analyzer.



Working:

- RF signal, which is to be analysed is applied to its attenuator. If the signal amplitude is too large, then it can be attenuated by an i/p attenuator.
- Low pass filter - allows only the frequency components that are less than cut-off frequency.
- Mixer gets the i/p from low pass filter and VCO's tuned oscillator. It produces an o/p which is the difference of frequencies of two signals that are applied to it.
- IF amplifier - amplifies the intermediate frequency signal. i.e., the o/p of mixer. The amplified IF signal is applied to detector.

The o/p of detector is given to vertical deflection plate of CRO. CRO displays the frequency spectrum of RF signals on its CRO screen.