

(4)
When no transmission occurs, the duplexed connection is received to the antenna. The receiver is of conventional Superheterodyne type. It uses frequency mixing to convert a received signal to a fixed intermediate frequency (IF). (Pulse modulator of the transmitted side uses a technique to encode a message into a pulsating signal. The technique is termed as pulse width modulation / Pulse duration modulation technique. Its main use is to allow the control of the power to the electrical devices (load)).

The first stage of the receiver side is a low noise RF amplifier. A better signal to noise ratio is obtained at this stage. It is a type of electronic amplifier to convert a low power radio frequency signal to a high signal. The RF output is mixed with a local oscillator output in a mixer circuit to produce the intermediate frequency (typical value being 60 MHz).

It is followed by an Intermediate frequency amplifier which provides sufficient gain and dynamic range to accommodate the expected variation of echo signal power. It is also termed as a fixed frequency amplifier which rejects the unwanted signals. It is used to change the frequency levels in circuit that are non-selective, difficult to tune & unstable.