

The Duet Channel Sounder is a two part transmitter and receiver system providing comprehensive analysis including BER, Multipath, Eb/No and RSSI. The Duet is a sequential correlating channel sounder which is an improved version of the "sliding correlator sounder". The Duet Channel Sounder provides insight into propagation analysis in the presence of fades, noise and multipaths for the 2.4 GHz ISM band.

The Duet has selectable chip rates up to 9.83 Mchips/second.

Purpose of Experimental Program

The purpose of the experimental program is to determine whether the equipment will support the coverage range required for application to seismic telemetry work. The equipment in question is designed specifically to characterize the radio channel in this environment. Use of this equipment in the geophysical industry for seismic telemetry is a novel approach. If the results of the program prove positive, an additional method of conducting geophysical exploration at reduced cost will have been shown to be available. This in turn will facilitate the location of oil and gas reserves.