QAM trainer is developed to help engineers understand the concept of merging the techniques of Phase Shift Keying (PSK) and Amplitude Shift Keying together to form Quadrature Amplitude Modulation (QAM) allowing the increase of data carrying capacity of the channel without consuming more bandwidth.

The QAM trainer allows the users to study the waveform generated during different stages of QAM modulation and demodulation. The extra user friendly, facility of user satiable trigger allows the user to search a particular bit. Pattern easily on the data sequence and view the waveform generated by it, making learning easier.

The onboard noise generator allows the user to generate noise of varying levels in the demodulator inputs and see their effect in the output of the demodulator.

Additional pins for constellation view are provided on the board for easy study of constellation diagrams of both modulator and demodulator.

Technical Specifications

Data Speed   : 15625 bits/sec.
Data Format   : Synchronous
Data Sequence : 24 bit user selectable via on board de-bounced DIP switches.
Data Coding   : Tribit (absolute).
Sine carriers : 15.625 Khz 0/90 degrees.
Analog signals synchronized to digital signals for easy viewing.
User Settable External Trigger for easy tribit sequence search in the waveform, an enhanced training feature allowing use r to search and view the desired I-Q-C combination on the CRO.
Constellation diagram interface for both modulated and de-modulated wave.
Noise generator on board with 4 levels digitally selectable via two on board de-bounced DIP switches.

Power supply   : ± 12 Vdc
Detailed Theory & Experimental Workbooks included free.

Note: Specifications are subject to change.

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