

### 4.12.1: Introduction

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Equalization and spectral analysis go hand in hand. As EQ changes spectral balance, spectrum analysis tools can be used to examine the frequency domain changes that are not immediately apparent from the normal time domain view. Several different types of EQ will be examined here including filters, shelving EQ, and parametric EQ. Spectral analysis will include both “flat” sonograph and pseudo 3D “water fall” types. Processing will be performed on a square wave as this waveform contains a series of well behaved harmonics (3x frequency at 1/3 amplitude, 5x frequency at 1/5 amplitude, and so on).

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