Lissajous Figures

Introduction

Lissajous figures displayed on an oscilloscope can be used to give a quick estimate of the relative phase of two signals at the same frequency. The plots presented here represent

\[ X = \cos(\omega t) \quad Y = \cos(\omega t + \phi) \]

where the phase angle \( \phi \) is indicated in degrees by the number in the top right of each plot. To use this catalogue, adjust the oscilloscope so that the \( X \) and \( Y \) signals have exactly the same amplitude (8 divisions peak-to-peak) the pattern is accurately centred on the screen.