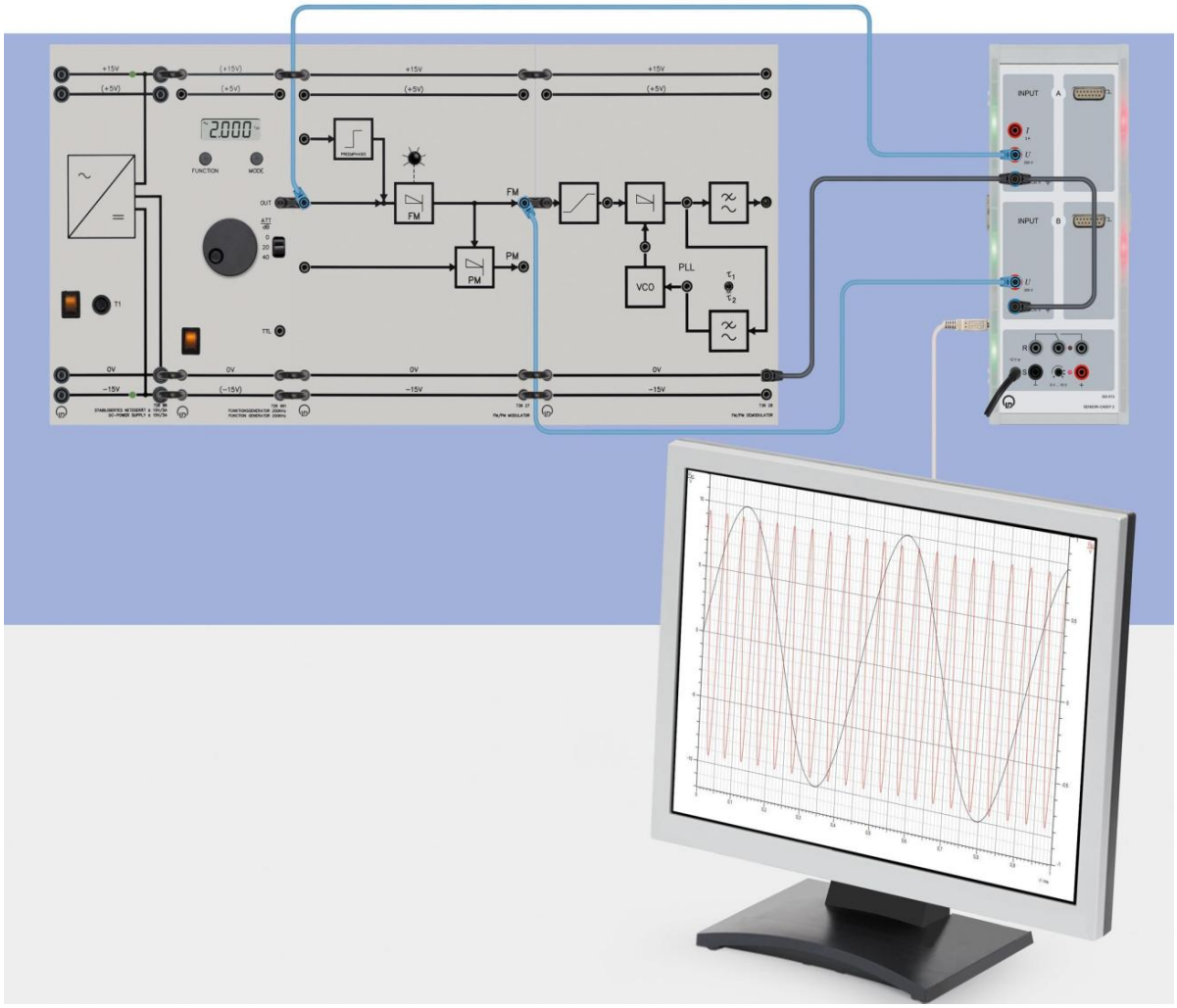
T 7.2.1 Analog Transmission Technology

T 7.2.1.5 Frequency Modulation



FM: Modulation, demodulation and the recording of spectra

Topics (selection)

- Dynamic response of FM and PM
- Determining the frequency deviation and modulation index
- Investigating of FM- and PM-spectra
- Bandwidth requirement of FM
- Principle of preemphasis
- Demodulation of FM and PM
- Recording the modulator characteristics

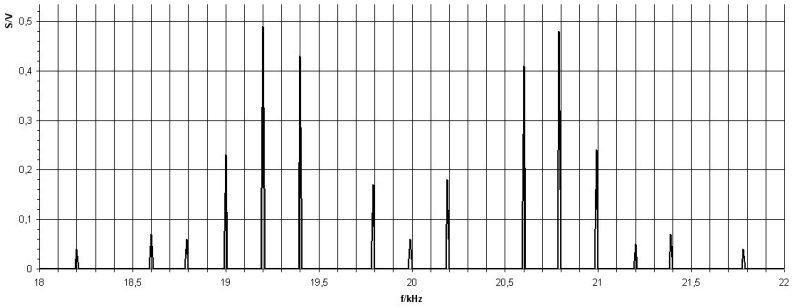
T 7.2.1 Analog Transmission Technology

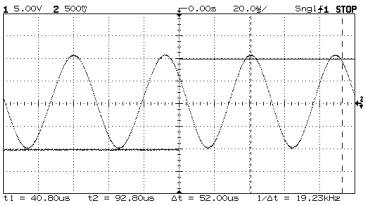
T 7.2.1.5 Frequency Modulation (FM)

Frequency and phase modulation are forms of angle modulation. Frequency modulation happens to play a major role in commercial telecommunications (VHF radio). With this training systems the students learn about modulators as important non-linear systems.

FM is widely used for broadcasting radio programs.

The spectrum of FM is non-linear. It contains of an infinite number of sidelines.





FM modulated by a square wave signal.

EQUIPMENT LIST T 7.2.1.5

Frequency Modulation

Quantity	Cat.-no	Description
1	736 27	FM/PM-Modulator
1	736 28	FM/PM-Demodulator
1	524 013S	Sensor-CASSY 2 Starter
1	564 072	Book: Frequency Modulation

A complete material list including accessories is available on request.