

Analog Communications 581084 (91018-20)



LabVolt Series

Datasheet

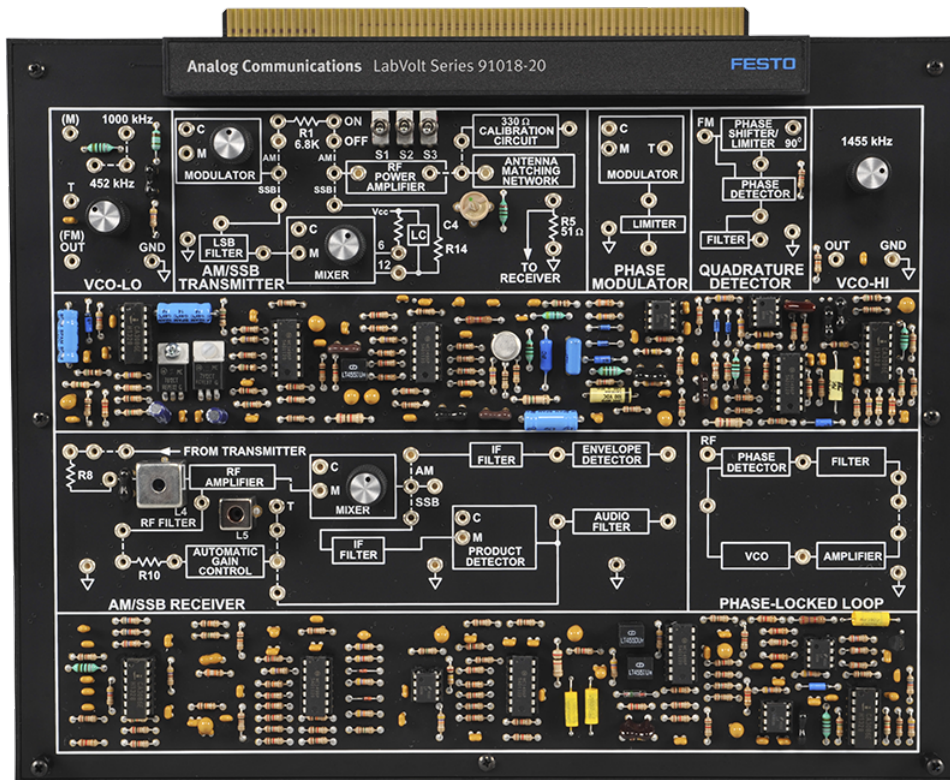


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General Description

With the Analog Communications circuit board, students can configure, operate, and troubleshoot the following circuits:

- Amplitude Modulation (AM) Transmitter and Receiver
- Single-Sideband (SSB) Transmitter and Receiver
- Frequency Modulator (FM)
- Phase Modulator (PM)
- Quadrature Detector (FM demodulation)
- Phase-Locked Loop (PLL)
- PLL FM Detector

Students learn the functions of oscillators, filters, amplifiers, LC networks, modulators, limiters, mixers, and detectors in communication circuits. Circuit modifications and faults provide students with the opportunity to develop troubleshooting skills. An optional unit covers the use of a Spectrum Analyzer.

This board is available in the following language variants:

- English variant: 91018-20
- French variant: 91018-21
- Spanish variant: 91018-22

Topic Coverage

- Analog Communication Concepts and Circuit Board Familiarization
- Amplitude Modulation, RF Power Amplifier, Balanced Modulator, RF Stage
- Mixer, IF Filter, Envelope Detector, Balanced Modulator, LSB Filter, RF Power Amplifier, Mixer, RF Stage
- Mixer and RF Power Amplifier
- RF Stage, Mixer, and IF Filter
- Product Detector and Automatic Gain Control
- Frequency and Phase Modulation
- Demodulation (Quadrature Detector)
- PLL Circuit and Operation, FM Detection with a PLL
- Troubleshooting Basics and Troubleshooting Analog Communication Circuits

Optional Manual(s)

Qty	Description	Model number
1	Analog Communications (Student Manual) _____	589703 (91578-P0) ¹
1	Analog Communications (Student Workbook) _____	580785 (91578-Q0)
1	Analog Communications (Instructor Guide) _____	580787 (91578-R0)

¹ The manuals Analog Communications, both the student manual and instructor guide, are also available in computer-based format.

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