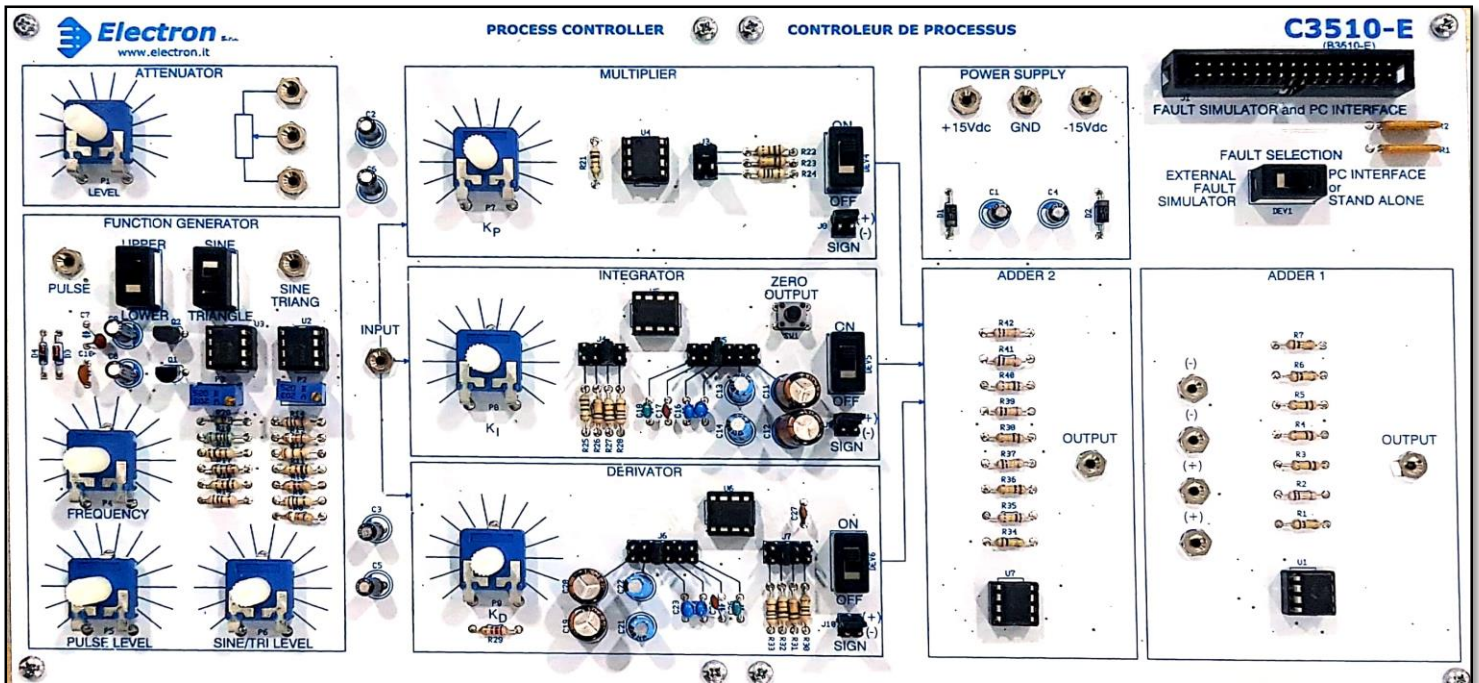


Digital Signal Processing (DSP) Kit

These are the available Experiments:

1. C54x Algebraic instructions.
2. Miscellaneous instructions.
3. Special Arithmetic and logical operation instructions.
4. Sampling and recording analog signal.
5. Mathematical operations.
6. Gaussian random generator.
7. Convolution of discrete signal.
8. Matrix multiplication.
9. Digital waveform generators (Sinewave generator).
10. Delay and Echo control of digital signal.
11. Speech Comander and digital Recorder.
12. μ - law digital recorder.
13. μ - law comander using expansion table.
14. FIR Lowpass, Highpass, Bandpass and Bandstop Filters.
15. Digital AM Modulator.
16. Digital Voice Scrambler.
17. IIR Bandpass filter.
18. FFT Algorithm.
19. DTMF Tone-Dialing system.
20. Speech Recognition.

Electrical and Electronic Lab

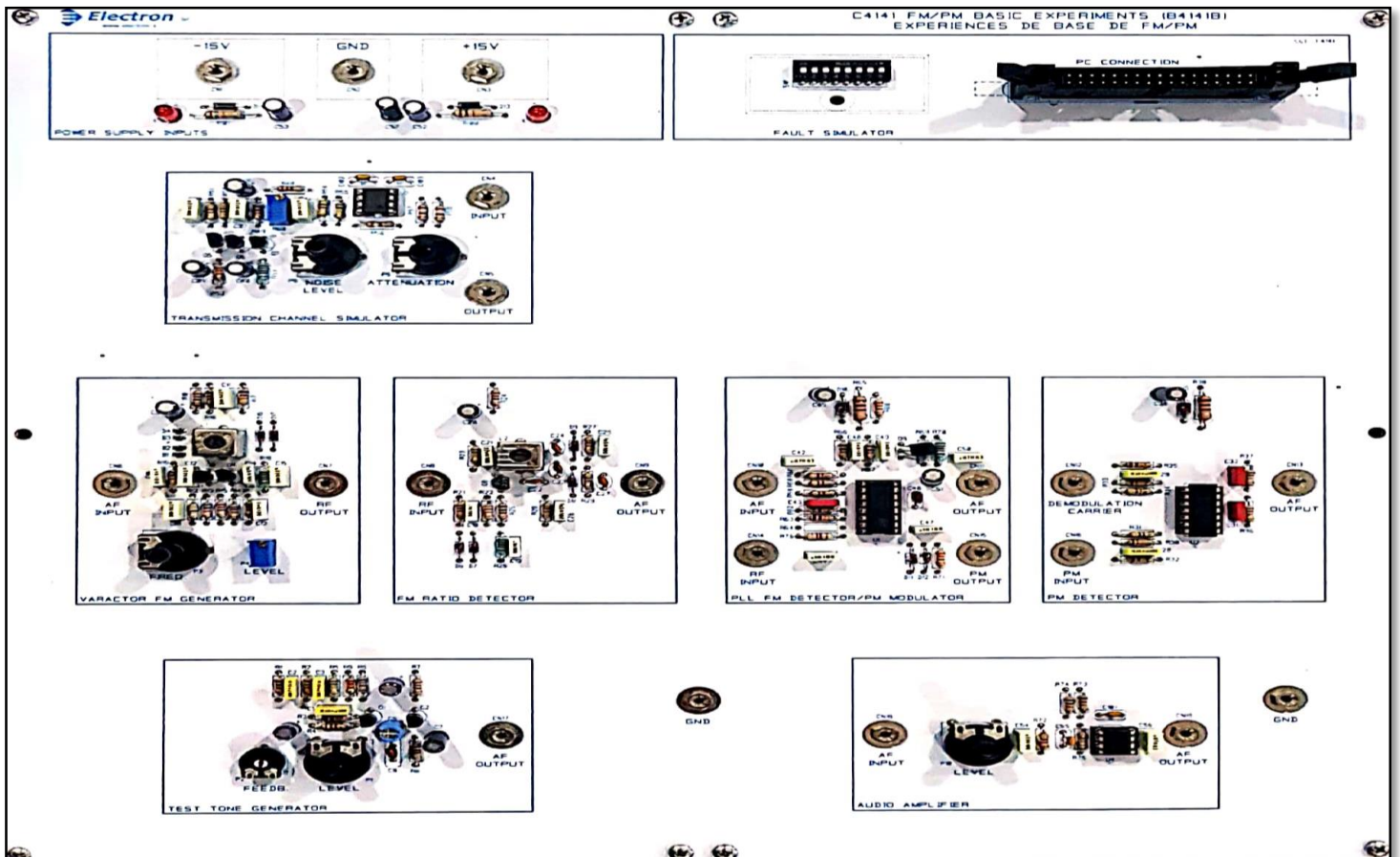


Control Kit

These are the available Experiments:

1. Open-Loop Control Of Linear Systems
2. Closed-Loop Control System.
3. The Gain of a Negative-Feedback Closed-Loop System.
4. Effects of Additive Disturbances in Negative-Feedback Closed-Loop.
5. Control Systems.
6. Effects of Multiplicative Parametric Disturbances in Negative-Feedback.
7. Closed-Loop Control Systems.
8. Bandwidth of Closed-Loop Control Systems.
9. Upper Band Limit, Lower Band Limit.
10. Regulation Error.
11. First-Order Time-Delay Systems.
12. Procedure to Record the Step Response.
13. Second-Order Time-Delay Systems.
14. Step Response of Second-Order Delay Systems.
18. First-Order System with One Pole and One Zero.
21. Derivative Control.
22. Proportional + Integrative + Derivative Control.
23. Control of the Non-Linear Processes.
15. Frequency Response of Second-Order Delay Systems.
16. The Integrator.
17. The Derivator.
19. Proportional Control
20. Integrative Control
24. Saturation.
25. Backlash.
26. Hysteresis.

Electrical and Electronic Lab



Communication Kit

These are the available Experiments:

FM/PM BASIC EXPERIMENTS

1. The Diode Modulator
2. Percentage of Modulation
3. Side Bands
4. The Transistor Modulator
5. The Mixer/Frequency Converter
6. The If Amplifier
7. The Envelope Detector
8. The PM Detector

DIGITAL Basic Experiment

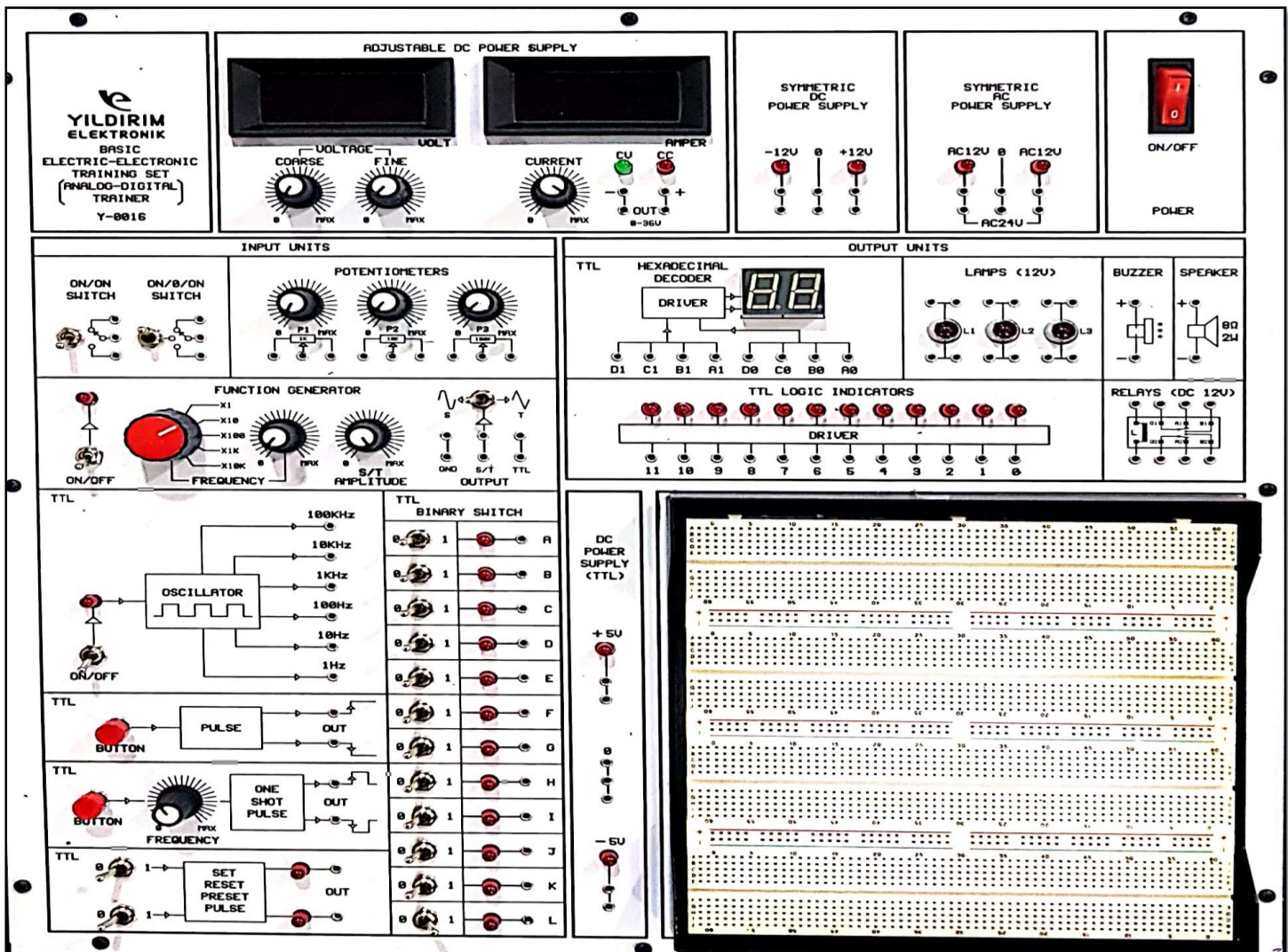
1. Pam Time-Division Multiplex
2. Basic PCM Operation
3. PCM Time Division Multiplex
4. Pulse-Width Modulation
5. Pulse-Position Modulation

AM BASIC EXPERIMENTS

1. The Test Tone Generator
2. The Varactor FM Generator
3. The PM Modulator
4. Modulation index and deviation ratio
5. Side bands and bandwidth for FM
6. The FM ratio Detector
7. The PLL FM Detector

6. Delta Modulation
7. Differential Modulation
8. DPCM
9. The AF COMPANDER

Electrical and Electronic Lab

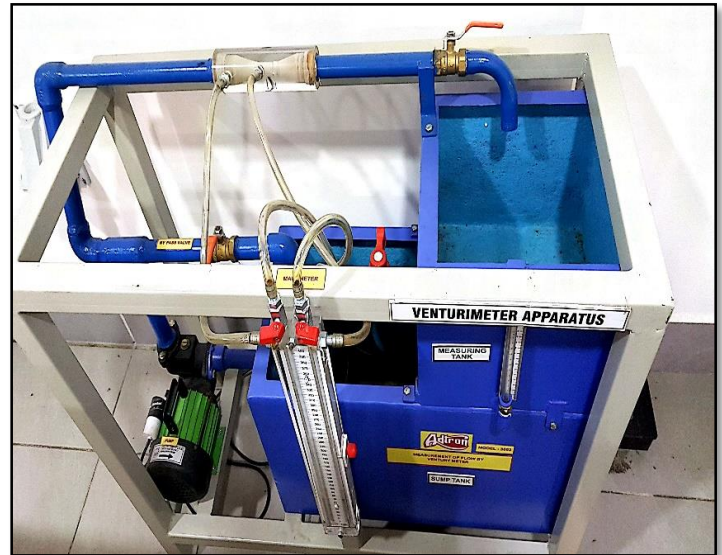
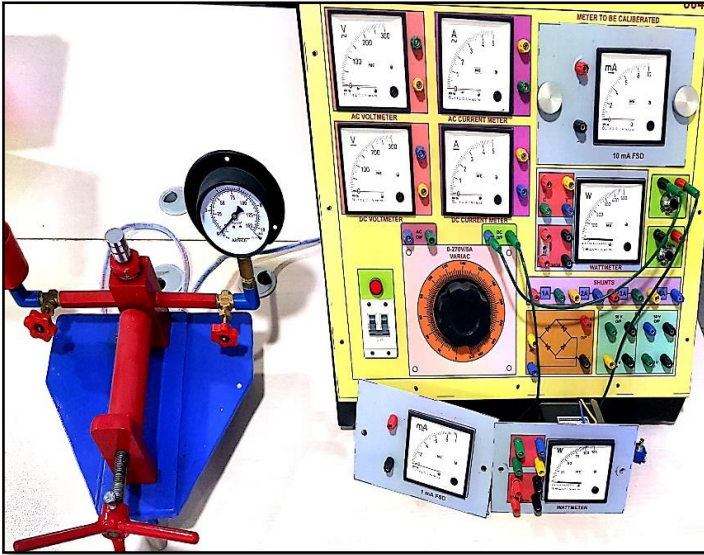


Electrical, Electronic and Logic Kit

These are the available Experiments:

1. Resistor color code and measurement
2. Investigation of ohms law, investigation of Kirchoff voltage, investigation of Kirchoff current law
3. Superposition theorem, THEVENIN theorem, NORTON theorem
4. Diode, half wave rectifier, full wave rectifier, bridge rectifier
5. Transistor region
6. Zener diode, parallel regulated rectifier, serial regulated, rectifier
7. Amplifier
8. Oscillator
9. Transformer
10. Logic gates
11. Boolean algebra and DEMORGAN theorem
12. Counter
13. Half adder, full adder, half subtractor, full subtractor.
14. Channels multiplexer
15. Channels De-multiplexer

Electrical and Electronic Lab

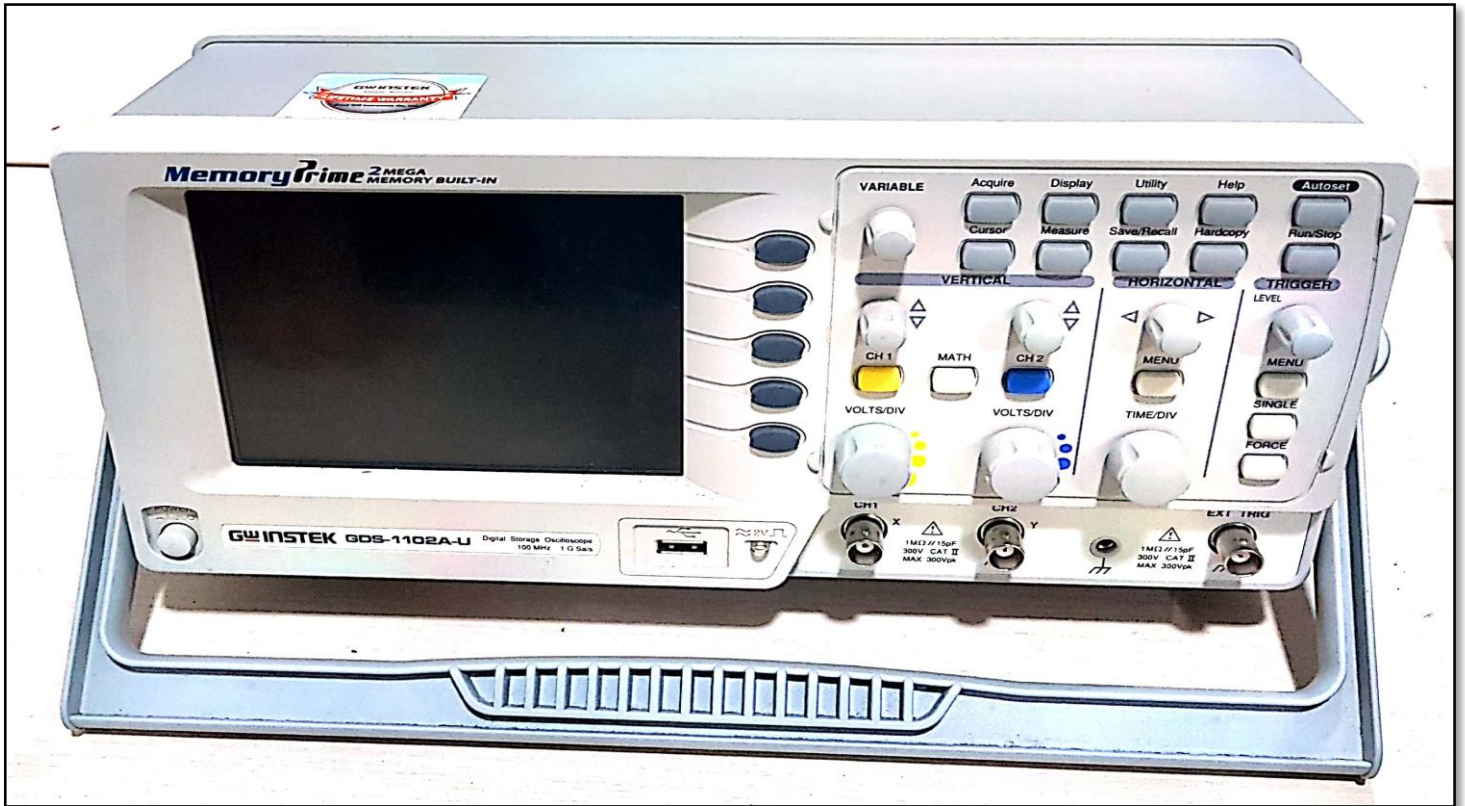


Instrumentation Lab

These are the available Experiments

1. Measurement of Torque Using Torque Transducer.
2. Measurement of Speed Using Inductive Pick – Up Transducer.
3. Measurement of Vibration.
4. Dead Weight Pressure Test.
5. Measurement of Flow by VENTURY Meter.
6. Calibration of Voltmeter, Ammeter and Wattmeter.
7. Temperature Measurement Using Non-Contact Thermometer.

Electrical and Electronic Lab



Oscilloscope Kit

- For DISPLAYING different types of Waves (Sinewave, Cosinewave, Sawtooth wave, square wave, etc...)
- Measure the FREQUENCY and VOLTAGE peak-peak.

Electrical and Electronic Lab



Electronic soldering equipment

- Special equipment for Electronic soldering
- Measurement equipment (AVO meter) for measuring AC and DC (Current, Voltage, Resistor, Capacitance and Inductance) in different scales.