

SINCOM[®]

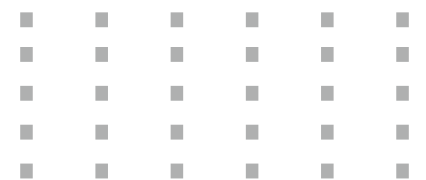
Sindhu ELECTRONICS & COMMUNICATIONS PVT. LTD.

Electronics Educational Trainer Kits



AN ISO 9001:2015
Certified Company

Let's Learn
The Gems
of Electronics



PRODUCT CATALOG

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SINC[®]OM

■ 30+Years of Trust



ABOUT US

Get to know about *our company*

Welcome to the cutting-edge world of electronics educational trainer kits company!

SINCOM is a prominent Electronics Manufacturing Company, pioneer in the design, manufacturing, marketing, and export of Electronic Educational Trainer Kits and Equipment.

SINCOM, established in 1995 by an Electronics Engineer and academician, is recognized as an MSME-approved and ISO 9001:2015 certified company, reflecting its unwavering commitment to quality and excellence. For the three decades, we have devoted ourselves to the service of educational institutions in India and abroad.

The R&D team is continually committed to the development of innovative high-quality products that are cost effective and promote customer satisfaction.

SINCOM's Training Kits are thoughtfully and skillfully designed to deliver a practical educational platform for both students and professionals. They simplify the implementation of technological concepts through experimental approaches, which are essential for adapting to sophisticated working systems in Industrial and real-world environments.

SINCOM is focused on delivering exceptional Customer Service and ensuring Customer Satisfaction through an extensive array of over 1,200 Trainer Kits. These Training kits are designed to be User-Friendly and of Excellent Quality, thereby enriching the learning experience for both students and professionals.

We ensure a seamless integration of the latest technology, utmost precision and outstanding craftsmanship, along with top-notch after-sales service.

As a prominent manufacturer, we serve colleges and educational institutions, equipping the upcoming generation of engineers and technologists.

Our cutting-edge Trainer kits provide practical learning opportunities, promoting creativity and proficiency in electronic circuits, thereby paving the way for a promising future for aspiring individuals.



AN ISO 9001:2015
Certified Company



Vision

To be a Trustworthy Global Leader of Innovative and user's friendly Electronics Educational Trainer Kits and Equipments for Educational Institutes.



Mission

To develop innovative, cost effective and user friendly Technology Trainer kits that fully satisfy our customer needs and enhance customer satisfaction.

Why us

SINCOM is recognized as a leading brand of Electronics Educational Trainer kits in the Technical laboratories of Engineering Educational Institutes. The key features outlined below are instrumental in solidifying our position as a top choice among brands.

- Trusted Brand of over 30 years
- Make In India Products
- Over 1200 Trainer kits
- 3000+ Happy Clients
- Manufacturer & Exporter of Educational Trainer Kits
- ISO 9001:2015 Certified Quality Standards Products
- Excellent Quality Products
- Value for Money
- Prompt Delivery
- Technical Support
- Long Life Products
- User Friendly
- Outstanding After Sales Support



Our Clients -SINCOM Trainer kits are Useful for Your Educational Institutes

SINCOM Trainer Kits are extensively utilized across various Technical Institutions throughout India, including IITs, IIITs, NITs, Engineering colleges, Universities, Polytechnics, Science colleges, Vocational Training Institutes, Industrial Training Institutes, Research Centers, Government Training Departments, and Industries. Additionally, these kits have been exported to numerous countries, such as the USA, Europe, Malaysia, Singapore, Dubai, Oman, Nepal, Bhutan, Jordan, and various regions in Africa.

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Note: Products Design & Specifications are subject to change without any notice & availability of components.



PRODUCT FEATURES:

- User Friendly Product for Students and Professionals.
- A premier Educational Platform designed to enriched hands-on experience.
- Designed with careful consideration of safety precautions.
- Multi-colored Schematic Diagram on the front panel of the white board.
- Components securely positioned on the back side of the board.
- Elegantly enclosed in a premier Quality poly-coated Imported Pine Wooden Box.
- AC Mains 230V,50Hz Operated.
- In-Built Fixed / Variable DC Regulated Power Supply.
- Digital Meters on Board.
- Signal Generators on Board.
- Comprehensive Learning Objectives
- Interconnections by 2mm banana pins.
- Test points by 2mm banana sockets.
- Maximum Test Points to expolore all the corners of the Experiment.
- In-Depth Instruction Manual.

1. BASIC & APPLIED ELECTRONICS (Series 100)

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S.N.	Particulars	Model
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2. COMMUNICATION (Series 200)

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S.N.	Particulars	Model
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3.	Pulse Code Modulation(PCM) & Demodulation	SB-203
4.	Frequency Shift Keying (FSK) Modulation / Transmitter	SB-204
5.	Frequency Shift Keying (FSK) Demodulation / Receiver	SB-205
6.	Frequency Shift Keying (FSK) Modulation & Demodulation	SB-206
7.	Delta Modulation(DM)	SB-207
8.	Delta Demodulation	SB-208
9.	Delta Modulation & Demodulation	SB-209
10.	Adaptive Delta Modulation(ADM)	SB-210
11.	Adaptive Delta Demodulation	SB-211
12.	Adaptive Delta Modulation & Demodulation	SB-212
13.	ASK Modulation	SB-213
14.	ASK Demodulation	SB-214
15.	Amplitude Shift Keying (ASK) Modulation & Demodulation	SB-215
16.	PSK / BPSK Modulation	SB-216
17.	PSK / BPSK Demodulation	SB-217
18.	Phase Shift Keying (PSK) Modulation & Demodulation	SB-218
19.	QPSK Modulation	SB-219
20.	QPSK Demodulation	SB-220
21.	QPSK Modulation & Demodulation	SB-221
22.	QAM Modulation	SB-222
23.	QAM Demodulation	SB-223
24.	QAM Modulation & Demodulation	SB-224
25.	DPSK Modulation	SB-225
26.	DPSK Demodulation	SB-226
27.	DPSK Modulation & Demodulation	SB-227
28.	Differential Pulse Code Modulation (DPCM)	SB-228
29.	Differential Pulse Code Demodulation	SB-229
30.	Hamming Code Generator	SB-230
31.	Two Stage Network	SB-231
32.	Three Stage Network	SB-232
33.	Error Detector	SB-233
34.	Error Detection & Correction Trainer	SB-234
35.	Line Coding & Decoding Trainer	SB-235
36.	Delta and Adaptive Modulation & Demodulation	SB-236
37.	DPCM Modulation & Demodulation	SB-237
38.	ASK/FSK/PSK modulation & Demodulation Trainer	SB-238
39.	DTMF Encoder and Decoder	SB-239
40.	PN Sequence Generator	SB-240
41.	BPSK,QPSK Modulation & Demodulation	SB-241

Section C : Antennas

1.	Antenna Simulator Trainer	SC-201
2.	Design & Construct Yagi-Uda Antenna Design Trainer	SC-202
3.	Transmission Line Parameter Trainer (Simulated)	SC-203
4.	Transmission Line Parameter Trainer (Actual)	SC-204
5.	To Study Different Parts of Dish Antenna	SC-205

Section D : Radio, Audio, Video Engineering

1.	AM Superheterodyne Radio Receiver Demonstrator	SD-201
2.	AM Superheterodyne (1-Band) Radio Receiver with 5 Faults Creating Facility	SD-202
3.	AM Superheterodyne (2-Band) Radio Receiver with 5 Faults Creating Facility	SD-203

S.N.	Particulars	Model
4.	RF Characteristic of AM Radio Receiver Demonstrator (Selectivity,Sensitivity,Fidelity)	SD-204
5.	FM Radio Receiver with 5 Faults Creating Facility	SD-205
6.	Mixer Stage for AM Receiver	SD-206
7.	RF Amplifier for AM Receiver	SD-207
8.	RF Amplifier for FM Receiver	SD-208
9.	IF Amplifier stages for AM Receiver	SD-209
10.	IF Amplifier stages for FM Receiver	SD-210
11.	Squelch Circuit	SD-211
12.	Amplitude Limiter For FM Receiver	SD-212
13.	Bass and Treble Circuit	SD-213
14.	Graphic Equalizer Trainer (5 Bands)	SD-214
15.	Characteristics of Microphone	SD-215
16.	Characteristics of Loud Speaker	SD-216
17.	Characteristics of Cross Over Network Circuit	SD-217
18.	Characteristics of Loud Speaker & Microphone	SD-218
19.	Hi-Fi Stereo Amplifier Trainer with 5 Faults Creating Facility	SD-220
20.	Hi-Fi Public Address Amplifier Trainer with 5 Faults Creating Facility	SD-221
21.	Two Way Intercom Demonstrator	SD-223
22.	AM/FM Radio Receiver with 5 Faults Creating Facility	SD-231
23.	Study of Volume, Bass & Treble, Tone and Graphic Equalizer Audio control Circuits	SD-232

Section E : Fiber Optics Communication (FOC)

1.	Optical Communication Trainer with Analog Link	SE-201
2.	Optical Communication Trainer with Digital Link	SE-202
3.	Optical Communication Trainer with Analog and Digital Link	SE-203
4.	FM Modulation and Demodulation using Fiber Optics	SE-204
5.	AM Modulation and Demodulation using Fiber Optics	SE-205
6.	PAM Modulation and Demodulation using Fiber Optics	SE-206
7.	PWM Modulation and Demodulation using Fiber Optics	SE-207
8.	PPM Modulation and Demodulation using Fiber Optics	SE-208
9.	PSK Modulation and Demodulation using Fiber Optics	SE-209
10.	FSK Modulation and Demodulation using Fiber Optics	SE-210
11.	ASK Modulation and Demodulation using Fiber Optics	SE-211
12.	PCM Modulation and Demodulation using Fiber Optics	SE-212
13.	Fiber Optics Trainer of Numerical Aperture (NA) & Fiber Cable Losses	SE-213
14.	AM/FM Modulation and Demodulation using Fiber Optics	SE-214
15.	PAM/PWM/PPM Modulation & Demodulation using Fiber Optics	SE-215
16.	ASK/FSK/PSK Modulation & Demodulation using Fiber Optics	SE-216
17.	Characteristics of Fiber Optics Source	SE-217
18.	Characteristics of Fiber Optics Detector	SE-218
19.	NA (Numerical Aperture) measurement of Fiber Optics cable	SE-219
20.	Fiber Optics Cable Losses	SE-220
21.	Fiber Optics Communication with Analog, Digital,AM,FM,PAM, PWM,PPM signal link	SE-221
22.	Fiber Optics Communication with Analog,Digital,AM,FM,ASK,FSK,PSK signal link	SE-222
23.	Fiber Optics Communication with Analog, Digital, AM,FM,PAM, PWM,PPM, ASK,FSK,PSK signal link	SE-223
24.	Optical communication for Voice and Data signals	SE-224
25.	Advance Fiber Optics Trainer	SE-225



3. DIGITAL ELECTRONICS (Series 300)

S.N.	Particulars	Model
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Section A : Code Converter/Encoders/ Decoders

1.	BCD to Decimal Code Converter	SA-301
2.	Decimal to BCD Code Converter	SA-302
3.	BCD to Decimal Encoder & Decoder	SA-303
4.	BCD to Binary Code Converter (Encoder)	SA-304
5.	Binary to BCD Code Converter (Decoder)	SA-305
6.	BCD to Excess-3 Code Converter	SA-306
7.	Excess-3 to BCD Code Converter	SA-307
8.	Decimal to Excess-3 Encoder	SA-308
9.	Excess-3 to Decimal Decoder	SA-309
10.	BCD to Excess-3 Encoder & Decoder	SA-310
11.	Decimal to Excess-3 Encoder & Decoder	SA-311
12.	Gray to Binary Code Converter	SA-312
13.	Binary to Gray Code Encoder & Decoder	SA-313
14.	Octal to Binary Encoder	SA-314
15.	Binary to Octal Decoder	SA-315
16.	BCD to Decimal-Excess-3 Code converter	SA-316
17.	Decimal to BCD-Excess-3 Code converter	SA-317
18.	BCD to Seven Segment Decoder (Common Cathode Display)	SA-318
19.	BCD to Seven Segment Decoder (Common Anode Display)	SA-319
20.	BCD to Seven Segment Decoder (Common Anode & Cathode Display)	SA-320
21.	Binary to Gray Code converter	SA-321
22.	Priority Encoder	SA-322

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1.	Basic Logic Gates using Diode & Transistor	SB-301
2.	AND, NAND, NOT Gate Characteristics	SB-302
3.	OR ,NOR, NOT Gate Characteristics	SB-303
4.	EX-OR & EX-NOR Gate Characteristics	SB-304
5.	EX-OR Gate using NAND Gate	SB-305
6.	EX-OR Gate as Controlled Inverter	SB-306
7.	NAND as a Universal Gate	SB-307
8.	3NOR as a Universal Gate	SB-308
9.	NAND & NOR As Universal Gates	SB-309
10.	TTL Gates Transfer Characteristics	SB-310
11.	CMOS Gates Transfer Characteristics	SB-311
12.	RTL, DTL ,TTL Logic Gates Trainer	SB-312
13.	Noise Margin in TTL Gate	SB-313
14.	Boolean Expression Using Logic Gates	SB-314
15.	K-Map (SOP & POS Type)	SB-315
16.	Demorgan's Theorem	SB-316
17.	Basic Logic Gates Trainer (all types) Basic	SB-317
18.	TTL & CMOS Gates Transfer Characteristics	SB-318

Section C : Flip- Flops

1.	R-S Flip-Flop	SC-301
2.	R-S Flip-Flop using NAND & NOR Gate	SC-302
3.	R-S Flip- Flop using NAND Gate	SC-303
4.	JK Flip-Flop	SC-304
5.	JK Flip-Flop using RS Flip-Flop	SC-305
6.	JK Flip-Flop using NAND Gate	SC-306
7.	JK Master Slave Flip-Flop using gates	SC-307
8.	Master Slave JK Flip-Flop using IC 7476	SC-308
9.	D-Type Flip-Flop	SC-309
10.	T Flip-Flop	SC-310
11.	D & T Flip-Flop using RS Flip-Flop	SC-311
12.	Flip-Flop Trainer (all types)	SC-312
13.	RS and JK MS Flip-Flop	SC-313

S.N.	Particulars	Model
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Section D : Multiplexers & Demultiplexers

1.	Multiplexer 4:1 using IC 74153	SD-301
2.	Multiplexer 8:1 using IC 74151	SD-302
3.	Multiplexer 16:1 using IC 74150	SD-303
4.	Demultiplexer 1:4 using IC 74155 (2:4 Decoder)	SD-304
5.	Demultiplexer 1:8 using IC 74138 (3:8 Decoder)	SD-305
6.	Demultiplexer 1:16 using IC 74154 (4:16 Decoder)	SD-306
7.	Multiplexer 4:1 using Gates	SD-307
8.	Multiplexer 8:1 using Gates	SD-308
9.	Demultiplexer 1:4 using Gates	SD-309
10.	Demultiplexer 1:8 using Gates	SD-310
11.	4:1 Multiplexer & 1:4 Demultiplexer	SD-311
12.	8:1 Multiplexer & 1:8 Demultiplexer	SD-312
13.	16:1 Multiplexer & 1:16 Demultiplexer	SD-313
14.	Multiplexer Trainer (4:1, 8:1, 16:1)	SD-314
15.	Demultiplexer Trainer (1:4, 1:8, 1:16)	SD-315
16.	Multiplexer 8:1 and Demultiplexer 1:4	SD-316

Section E : Counters & Shift Registers

1.	Decade Counter Using IC 7490	SE-301
2.	Up-Down Counter using IC 74192	SE-302
3.	Up-Down counter using Flip-Flop	SE-303
4.	Synchronous Counter	SE-304
5.	Twisted Type Ring Counter	SE-305
6.	Johnson Type Ring Counter	SE-306
7.	Three Bit Binary Ripple Counter	SE-307
8.	Four Bit Binary Ripple counter	SE-308
9.	Four Bit Down counter	SE-309
10.	Four Bit UP Counter	SE-310
11.	MOD-N Counter (N = 2 To N = 9)	SE-311
12.	MOD-3 Counter	SE-312
13.	MOD-5 Counter	SE-313
14.	MOD-6 Counter using IC 7490	SE-314
15.	MOD-9 Counter	SE-315
16.	MOD-20 Counter using IC 7490	SE-316
17.	Buffer Register 4 bit	SE-317
18.	Serial In-Serial Out Shift Registers (SISO)	SE-318
19.	Serial In-Parallel Out Shift Registers (SIPO)	SE-319
20.	Parallel In-Serial Out Shift Registers (PISO)	SE-320
21.	Parallel In-Parallel Out Shift Registers (PIPO)	SE-321
22.	Left, Right Shift Registers	SE-322
23.	Four Bit Universal Shift Registers	SE-323
24.	SISO & SIPO Shift Register	SE-324
25.	PISO & PIPO Shift Register	SE-325
26.	SISO, SIPO, PISO & PIPO Shift Register	SE-326
27.	IC4035 as a Universal Shift Registers	SE-327

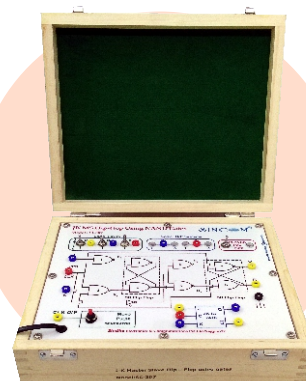
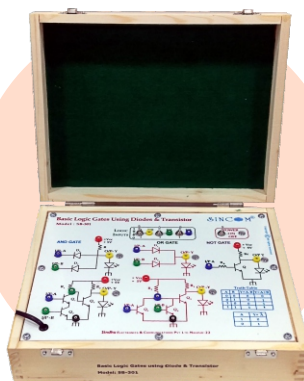
Section F : ALU & Applications

1.	Half Adder	SF-301
2.	Full Adder	SF-302
3.	Half & Full Adder	SF-303
4.	Half Subtractor	SF-304
5.	Full Subtractor	SF-305
6.	Half & Full Subtractor	SF-306
7.	Full Adder & Full Subtractor	SF-307
8.	Four Bit Adder	SF-308
9.	Five Bit Adder	SF-309
10.	Four Bit Subtractor	SF-310
11.	Five Bit Subtractor	SF-311
12.	Four Bit Adder & Subtractor using IC 7483	SF-312
13.	8 Bit Adder & Subtractor using IC 7483	SF-313
14.	Four Bit Comparator	SF-314
15.	Study of ALU using IC 74181	SF-315

S.N.	Particulars	Model
16.	Half Adder & Half Subtractor	SF-316
17.	Half & Full Adder Subtractor	SF-317

Section G : Applications

1.	Analog to Digital (A to D) Converter	SG-301
2.	A To D Converter using Successive Approximation Method	SG-302
3.	ADC using IC 0809	SG-303
4.	Digital to Analog (D to A) Converter (4-Bit) R-2R Network	SG-304
5.	D to A Converter using Binary Weighed Method (Four Bit)	SG-305
6.	DAC using IC 0800	SG-306
7.	Schmitt Trigger using Gates	SG-307
8.	Controlled Inverter using Gates	SG-308
9.	Astable Multivibrator using Gates	SG-309
10.	Monostable Multivibrator using Gates	SG-310
11.	Monostable Multivibrator using IC	SG-311
12.	Bistable Multivibrator using Gates	SG-312
13.	Astable ,Monostable,Bistable Multivibrator using Gates	SG-313
14.	Clock Oscillator using Gates	SG-314
15.	ROM using diode	SG-315
16.	Study of RAM	SG-316
17.	NOR Gate as Comparator	SG-317
18.	NAND Gate as Comparator	SG-318
19.	NOR & NAND Gate as Comparator	SG-319
20.	Parity Generator	SG-320
21.	Even & Odd Parity Checker	SG-321
22.	Parity Generator & Checker	SG-322
23.	Interfacing of CMOS To TTL &TTL To CMOS IC's	SG-323
24.	Directional Buffer using IC 74245	SG-324
25.	Uni-Directional Buffer	SG-325
26.	ADC 0809 and DAC 0800 Trainer	SG-326
27.	A to D Converter using OP-AMP and ADC IC 0809	SG-327
28.	D to A Converter using R-2R, Binary Weighed Method and DAC IC 0800	SG-328
29.	D to A Converter using R-2R Network & Binary Weighed Method	SG-329
30.	A to D using OP-AMP and D to A Converter using R-2R Network	SG-330
31.	Sampling Gates	SG-331



4. POWER / INDUSTRIAL ELECTRONICS (Series 400)

400

S.N.	Particulars	Model
Section A: Characteristics		
1.	SCR Characteristics	SA-401
2.	SCR Characteristics with Digital Meters	SA-401DM
3.	DIAC Characteristics	SA-402
4.	DIAC Characteristics with Digital Meters	SA-402DM
5.	TRIAC Characteristics	SA-403
6.	TRIAC Characteristics with Digital Meters	SA-403DM
7.	IGBT Characteristic	SA-406
8.	IGBT Characteristic with Digital Meters	SA-406DM
9.	Characteristics of SCR,DIAC & TRIAC	SA-407
10.	Characteristics of SCR,DIAC & TRIAC with Digital Meters	SA-407DM
11.	Characteristics of Power Transistor	SA-408
12.	Characteristics of Power Transistor with Digital Meters	SA-408DM
13.	Characteristics of SCR and DIAC	SA-409
14.	Characteristics of SCR and DIAC with Digital Meters	SA-409DM
15.	Characteristics of DIAC and TRIAC	SA-410
16.	Characteristics of DIAC and TRIAC with Digital Meters	SA-410DM
17.	Characteristics of SCR,DIAC, TRIAC & MOSFET	SA-411
18.	Characteristics of SCR,DIAC, TRIAC & MOSFET with Digital Meters	SA-411DM
19.	Characteristics of SCR,DIAC, TRIAC & IGBT	SA-412
20.	Characteristics of SCR,DIAC, TRIAC & IGBT with Digital Meters	SA-412DM
21.	Characteristics of SCR, TRIAC, MOSFET & IGBT	SA-413
22.	Characteristics of SCR, TRIAC, MOSFET & IGBT with Digital Meters	SA-413DM
Section B: SCR Turn-On & Turn-Off (Commutation) Circuits		
1.	SCR Gate Triggering using DC Voltage ® Triggering)	SB-401
2.	SCR Gate Triggering using UJT Relaxation Oscillator	SB-402
3.	SCR Gate Triggering using Square Wave Pulse	SB-403
4.	SCR Gate Triggering using RC Network	SB-404
5.	SCR Gate Triggering using AC Voltage	SB-405
6.	SCR Class A Commutation	SB-406
7.	SCR Class B Commutation	SB-407
8.	3SCR Class C Commutation	SB-408
9.	SCR Class D Commutation	SB-409
10.	SCR Class E Commutation	SB-410
11.	SCR Class F Commutation	SB-411
12.	SCR Gate Triggering (Turn-ON Methods) Trainer	SB-412
13.	SCR Force Commutation (Turn-OFF Methods)Trainer All Types	SB-413
14.	SCR R (DC) and RC Gate Triggering	SB-414
15.	SCR Class A,B,C Commutation (Turn-Off) circuits	SB-415
16.	SCR Class D,E,F Commutation (Turn-Off) circuits	SB-416
Section C : Phase Controlled Rectifiers / Converters		
1.	SCR Firing & Conduction Angle	SC-401
2.	Phase Shift Control of SCR	SC-402
3.	Phase Shift Control of TRIAC	SC-403
4.	SCR Single Phase (1Ø) Half Wave Half Controlled Rectifier	SC-404
5.	SCR Single Phase (1Ø) Half Wave Full Controlled Rectifier	SC-405
6.	SCR Single Phase (1Ø) Full Wave Half Controlled Rectifier	SC-406
7.	SCR Single Phase (1Ø) Full Wave Full Controlled Rectifier	SC-407
8.	SCR Single Phase (1Ø) Full Wave Half Controlled Bridge Rectifier	SC-408
9.	Three Phase Rectifier using Diodes (Uncontrolled)	SC-409
10.	SCR Half/Full Wave Rectifier	SC-410
11.	SCR Half wave, Full Wave, Bridge Half Controlled Rectifier/Converter with Resistive & Indicative Load	SC-411
12.	Phase Shift Control of SCR & TRIAC	SC-412
13.	SCR Full Wave-Half Controlled Rectifier with Resistive & Indicative Load	SC-413
14.	Voltage Controlled using SCR Controlled Rectifier	SC-414

S.N.	Particulars	Model
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Section D : Stabilizer, Inverters, Converters, Choppers

1.	Relay Type AC Voltage Stabilizer (Buck & Boost Type) trainer	SD-401
2.	AC SERVO Controlled Voltage Stabilizer Demonstrator	SD-402
3.	Emergency Light System Demonstrator with 6V Battery	SD-403
4.	Automatic Battery Charger Demonstrator with 12V Battery	SD-404
5.	Inverter Demonstrator 500 VA with 12V Battery	SD-405
6.	UPS Demonstrator Offline 500 VA with 12V Battery	SD-406
7.	SCR Series Inverter	SD-407
8.	SCR Parallel Inverter	SD-408
9.	SCR Step Up Chopper	SD-409
10.	SCR Step Down Chopper	SD-410
11.	Jone's Chopper	SD-411
12.	Single Phase SCR Cycloconverter	SD-412
13.	Demorgan's Chopper	SD-413
14.	SCR Step Up & Step Down Chopper	SD-414
15.	SCR Half Bridge Inverter with R and RL Load	SD-415
16.	SCR Series and Parallel Inverter	SD-416
17.	SCR Full Bridge Inverter with R and RL Load	SD-417

Section E : Applications Circuits

1.	Light Dimmer using TRIAC	SE-401
2.	Temperature Control using SCR	SE-402
3.	Illumination Control using SCR	SE-403
4.	TRIAC as a Three Position Static Switch	SE-404
5.	DC Timer using SCR & UJT	SE-405
6.	AC Timer using SCR & UJT	SE-406
7.	Sequential Timer using SCR & UJT (Three Stage)	SE-407
8.	DC Timer using Transistor	SE-408
9.	Ultra Precise Long Time Delay Relay	SE-409
10.	Sequential Timer using SCR & UJT (Four Stage)	SE-410
11.	Sequential Timer using IC 555 (Three Stage)	SE-411
12.	Thyristor Time Delay Relay Circuit	SE-412
13.	Batch Counter Circuit	SE-413
14.	Fan Speed Control using TRIAC	SE-414
15.	Flame Failure Circuit	SE-415
16.	SCR Flasher Circuit	SE-416
17.	DC to DC Converter	SE-417
18.	Photo Relay (Light Operated Relay) using IC 555 & Transistor	SE-418
19.	Speed Control of 12 V DC Motor	SE-419
20.	Speed Control of DC Motor with DC Motor	SE-420
21.	Speed Control of AC Motor with AC Motor	SE-421
22.	DC & AC Timer using SCR & UJT	SE-422
23.	Burglar Alarm Using LDR with Faults facility	SE-423
24.	Touch Circuit using SCR	SE-424
25.	Circuit Breaker using SCR & UJT	SE-425
26.	Stepper Motor Speed Control	SE-426
27.	SCR RC Snubber Circuit	SE-427



5. LINEAR INTEGRATED CIRCUITS (Series 500)

S.N.	Particulars	Model
Section A : Op-Amp Amplifiers		
1.	Single and Double Ended BJT Differential Amplifier	SA-501
2.	IC 741 as Differential Amplifier	SA-502
3.	Op-Amp IC 741 as Inverting Amplifier	SA-503
4.	Op-Amp IC 741 as Non Inverting Amplifier	SA-504
5.	IC 741 as Inverting & Non-Inverting Amplifier	SA-505
6.	Op-Amp IC 741 as Adder & Averager	SA-506
7.	Op-Amp IC 741 as Subtractor	SA-507
8.	IC 741 as Adder, Averager & Subtractor	SA-508
9.	IC 741 as Adder, Averager & Subtractor with 2 Digital Meters	SA-508DM
10.	Op-Amp IC 741 as Buffer/Unity Gain/follower Amplifier	SA-509
11.	Op-Amp IC 741 as AC Amplifier	SA-510
12.	Op-Amp IC 741 as DC Amplifier	SA-511
13.	IC 741 as AC & DC Amplifier	SA-512
14.	Instrumentation Amplifier using IC 741	SA-513
15.	Instrumentation Amplifier with Linear Gain Control	SA-514
16.	IC 741 as Log Amplifier	SA-515
17.	IC 741 as Antilog Amplifier	SA-516
18.	IC 741 as Log & Antilog Amplifiers	SA-517
19.	Differential Amplifier using two Op-Amp	SA-518
20.	Differential Amplifier using three Op-Amp	SA-519
21.	Differential Amplifier using four Op-Amp	SA-520
22.	IC 810 as Audio Power Amplifier	SA-521
23.	To Determine Slew Rate of Op-Amp	SA-522
24.	To Determine CMRR of Op-Amp	SA-523
25.	To Determine Slew Rate & CMRR of Op-Amp	SA-524
26.	Op-Amp IC 741 Characteristics (Parameters)	SA-525
27.	IC 741 as Audio Amplifier	SA-526
28.	Output Voltage Swing of Op- Amp. (Ic741)	SA-527
29.	IC 741 Input & Output Offset Voltage	SA-528
Section B : Op-Amp Active Filters		
1.	IC 741 as Ist Order Active Low Pass Filter (Butter worth)	SB-501
2.	IC 741 as Ist Order Active High Pass Filter	SB-502
3.	IC 741 as Ist Order Active Low Pass & High Pass Filter	SB-503
4.	IC 741 as IInd Order Active Low Pass Filter	SB-504
5.	IC 741 as IInd Order Active High Pass Filter	SB-505
6.	IC 741 as IInd Order Active Low Pass & High Pass Filter	SB-506
7.	IC 741 as Ist & IInd Order Active Low Pass Filter	SB-507
8.	IC 741 as Ist & IInd Order Active High Pass Filter	SB-508
9.	IC 741 as IIIrd Order Active Low Pass Filter	SB-509
10.	IC 741 as IIIrd Order Active High Pass Filter	SB-510
11.	IC 741 as IVth Order Active Low Pass Filter	SB-511
12.	IC 741 as IVth Order Active High Pass Filter	SB-512
13.	IC 741 as Wide Band Pass Filter	SB-513
14.	IC 741 as Narrow Band Pass / Notch Filter	SB-514
15.	IC 741 as Wide Band Reject Filter	SB-515
16.	IC 741 as Band Pass & Band Reject Filter	SB-516
17.	IC 741 as All Pass Filter	SB-517
18.	IC 741 as Chebyshev Filter	SB-518
19.	IC 741 as Biquad Filter	SB-519
20.	IC 741 as Low, High & Band Pass filter (1st Order)	SB-520
21.	IC 741 as 2nd order Low, High & Band Pass filter (2nd Order)	SB-521

S.N.	Particulars	Model
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Section C : Multivibrators, Oscillators & Wave Forms Generators

1.	IC 741 as Phase Shift Oscillator	SC-501
2.	IC 741 as Wein Bridge Oscillator	SC-502
3.	IC 741 as Quadrature Oscillator	SC-503
4.	IC 741 as Hartley Oscillator	SC-504
5.	IC 741 as Collpitts Oscillator	SC-505
6.	IC 741 as Crystal Oscillator	SC-506
7.	IC 741 as Phase Shift & Wein Bridge Oscillator	SC-507
8.	IC 741 as Square Wave Generator	SC-508
9.	IC 741 as Sawtooth Generator	SC-509
10.	IC 741 as Triangular Wave Generator	SC-510
11.	IC 741 as Square & Triangular Wave Generator	SC-511
12.	IC 741 as Astable Multivibrator	SC-512
13.	IC 741 as Bistable Multivibrator	SC-513
14.	IC 741 as Monostable Multivibrator	SC-514
15.	IC 741 as Astable & Monostable Multivibrator	SC-515
16.	IC 741 as Astable, Monostable & Bistable Multivibrator	SC-516
17.	IC 741 as Schmitt Trigger	SC-517
18.	IC XR2206 as Function Generator	SC-518
19.	OP-AMP 741 as Oscillators (All types)	SC-519
20.	OP-Amp IC 741 as Sine, Square & Triangular wave (function) Generator	SC-520
21.	IC 741 as Hartley & Collpitts Oscillator	SC-521

Section D : Phased Lock Loop (PLL)

1.	IC 565 as Phased Lock Loop (PLL)	SD-501
2.	Voltage Controlled Oscillator (VCO) using IC 566/565	SD-502
3.	IC 565 as Frequency Multiplier	SD-503
4.	PLL IC 565 Trainer	SD-504

Section E : Op-Amp Applications Circuit

1.	IC 741 as Non Inverting Comparator	SE-501
2.	IC 741 as Inverting Comparator	SE-502
3.	IC 741 as Inverting & Non Inverting Comparator	SE-503
4.	IC 710 as Voltage Comparator	SE-504
5.	Op-Amp IC 741 as Precision Half Wave Rectifier	SE-505
6.	Op-Amp IC 741 as Precision Full Wave Rectifier	SE-506
7.	Op-Amp IC 741 as Precision Half Wave & Full Wave Rectifier	SE-507
8.	Op-Amp IC 741 as V to I Converter	SE-508
9.	Op-Amp IC 741 as I to V Converter	SE-509
10.	Op-Amp IC 741 as V To I & I To V Converter	SE-510
11.	IC 741 as Zero Crossing Detector (ZCD)	SE-511
12.	IC 741 as Peak Detector (APD)	SE-512
13.	IC 741 as ZCD & APD	SE-513
14.	IC 741 as Window Detector	SE-514
15.	IC 741 as Positive & Negative Clipper circuit	SE-515
16.	IC 741 as Clamper circuit	SE-516
17.	IC 741 as Clipper & Clamper circuit	SE-517
18.	IC 741 as Differentiating Circuit	SE-518
19.	IC 741 as Integrating Circuit	SE-519
20.	IC 741 as Differentiating & Integrating Circuit	SE-520
21.	IC 741 as Sample & Hold Circuit	SE-521
22.	IC 741 as Voltage to Frequency Converter (V-F)	SE-522
23.	IC 741 as Frequency to Voltage Converter (F-V)	SE-523
24.	IC 741 as V-F and F-V Converter	SE-524
25.	IC 741 as Staircase generator	SE-525

S.N. Particulars

Model

Section F : Timer IC 555 Circuits

1.	IC 555 as Astable Multivibrator	SF-501
2.	IC 555 as Bistable Multivibrator	SF-502
3.	IC 555 as Monostable Multivibrator	SF-503
4.	IC 555 as Astable & Monostable Multivibrator	SF-504
5.	IC 555 as Astable, Monostable & Bistable Multivibrator	SF-505
6.	IC 555 as Schmitt Trigger	SF-506
7.	IC 555 as Voltage Controlled Oscillator (VCO)	SF-507
8.	IC 555 as Frequency Divider	SF-508
9.	IC 555 as Ramp Generator	SF-509
10.	IC 555 as Water Level Controller	SF-510
11.	DC Timer using IC 555	SF-511
12.	AC Timer using IC 555	SF-512
13.	AC & DC Timer using IC 555	SF-513
14.	Sequential Timer using IC 555 (Three Stage)	SF-514
15.	Touch Switch using IC 555	SF-515
16.	IC 555 as light operated Photo Relay	SF-516
17.	IC 555 as Continuity Tester	SF-517
18.	IC 555 as Tone Generator	SF-518
19.	IC 741 as DC & AC Timer	SF-519
20.	IC 555 as Application Trainer	SF-520
21.	IC 555 as Monostable, Bistable and Schmitt Trigger	SF-521
22.	IC 555 as Schmitt Trigger and Voltage Controlled Oscillator (VCO)	SF-522
23.	IC 555 as Astable, Monostable & Voltage Controlled Oscillator (VCO)	SF-523



6. NETWORK & BRIDGES CIRCUITS (Series 600)

S.N.	Particulars	Model
1.	Ohm's Law	SE-601
2.	Ohm's Law with 2 Digital Meters	SE-601DM
3.	Kirchoff's Current Law (KCL)	SE-602
4.	Kirchoff's Current Law (KCL) with Digital Meters	SE-602DM
5.	Kirchoff's Voltage Law (KVL)	SE-603
6.	Kirchoff's Voltage Law (KVL) with Digital Meters	SE-603DM
7.	Kirchoff's Laws (KCL & KVL)	SE-604
8.	Kirchoff's Laws (KCL & KVL) with Digital Meters	SE-604DM
9.	Kirchoff's Laws (KCL & KVL) for AC Circuit with Digital Meters	SE-604ACDM
10.	Maxwell Loop Current method	SE-605
11.	RC Series Resonance	SE-606
12.	RC Parallel Resonance	SE-607
13.	RC Series & Parallel Resonance	SE-608
14.	RL Series Resonance	SE-609
15.	RL Parallel Resonance	SE-610
16.	RL Series & Parallel Resonance	SE-611
17.	RLC Series Resonance	SE-612
18.	RLC Parallel Resonance	SE-613
19.	RLC Series & Parallel Resonance	SE-614
20.	RC Lead Circuit	SE-615
21.	RC Lag Circuit	SE-616
22.	RC lead and Lag Circuit	SE-617
23.	RC & LC Circuit	SE-618
24.	Thevenin's Theorem for DC Circuit	SE-619
25.	Thevenin's Theorem for DC Circuit with Digital Meters	SE-619DM
26.	Thevenin's Theorem for AC Circuit	SE-619AC
27.	Thevenin's Theorem for AC Circuit with Digital Meters	SE-619ACDM
28.	Norton's Theorem for DC Circuit	SE-620
29.	Norton's Theorem for DC Circuit with Digital Meters	SE-620DM
30.	Norton's Theorem for AC Circuit	SE-620AC
31.	Norton's Theorem for AC Circuit with Digital Meters	SE-620ACDM
32.	Millman's Theorem for DC Circuit	SE-621
33.	Millman's Theorem for DC Circuit with Digital Meters	SE-621DM
34.	Millman's Theorem for AC Circuit	SE-621AC
35.	Millman's Theorem for AC Circuit with Digital Meters	SE-621ACDM
36.	Superposition Theorem for DC Circuit	SE-622
37.	Superposition Theorem for DC Circuit with Digital Meters	SE-622DM
38.	Superposition Theorem for AC Circuit	SE-622AC
39.	Superposition Theorem for AC Circuit with Digital Meters	SE-622ACDM
40.	Reciprocity Theorem for DC Circuit	SE-623
41.	Reciprocity Theorem for DC Circuit with Digital Meters	SE-623DM
42.	Reciprocity Theorem for AC Circuit	SE-623AC
43.	Reciprocity Theorem for AC Circuit with Digital Meters	SE-623ACDM
44.	Maximum Power Transfer Theorem for DC Circuit	SE-624
45.	Maximum Power Transfer Theorem for DC Circuit with Digital Meters	SE-624DM
46.	Maximum Power Transfer Theorem for AC Circuit	SE-624AC
47.	Maximum Power Transfer Theorem for AC Circuit with Digital Meters	SE-624ACDM
48.	Tellegan's Theorem for DC Circuit	SE-625
49.	Tellegan's Theorem for DC Circuit with Digital Meters	SE-625DM
50.	Tellegan's Theorem for AC Circuit	SE-625AC
51.	Tellegan's Theorem for AC Circuit with Digital Meters	SE-625ACDM
52.	Duality Theorem for DC Circuit	SE-626
53.	Duality Theorem for DC Circuit with Digital Meters	SE-626DM

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S.N.	Particulars	Model
54.	Duality Theorem for AC Circuit	SE-626AC
55.	Duality Theorem for AC Circuit with Digital Meters	SE-626ACDM
56.	Compensation Theorem for DC Circuit	SE-627
57.	Compensation Theorem for DC Circuit with Digital Meters	SE-627DM
58.	Compensation Theorem for AC Circuit	SE-627AC
59.	Compensation Theorem for AC Circuit with Digital Meters	SE-627ACDM
60.	Thevenin's, Norton's Theorem for DC Circuit	SE-628
61.	Thevenin's, Norton's Theorem for DC Circuit with Digital Meters	SE-628DM
62.	Thevenin's, Norton's Theorem for AC Circuit	SE-628AC
63.	Thevenin's, Norton's Theorem for AC Circuit with Digital Meters	SE-628ACDM
64.	Maximum Power, Reciprocity and Superposition Theorem for DC Circuit	SE-629
65.	Maximum Power, Reciprocity and Superposition Theorem for DC Circuit with Digital Meters	SE-629DM
66.	Maximum Power, Reciprocity and Superposition Theorem for AC Circuit	SE-629AC
67.	Maximum Power, Reciprocity and Superposition Theorem for AC Circuit with Digital Meters	SE-629ACDM
68.	Two Port Network for Z & Y Parameters for DC Circuit	SE-630
69.	Two Port Network for Z & Y Parameters for DC with Digital Meters	SE-630DM
70.	Two Port Network for Z & Y Parameters for AC	SE-630AC
71.	Two Port Network for Z & Y Parameters for AC with Digital Meters	SE-630ACDM
72.	Two Port Network for ABCD Parameters for DC Circuit	SE-631
73.	Two Port Network for ABCD Parameters for DC with Digital Meters	SE-631DM
74.	Two Port Network for ABCD Parameters for AC	SE-631AC
75.	Two Port Network for ABCD Parameters for AC with Digital Meters	SE-631ACDM
76.	Two Port Network for h & g Parameters for DC Circuit	SE-632
77.	Two Port Network for h & g Parameters for DC with Digital Meters	SE-632DM
78.	Two Port Network for h & g Parameters for AC	SE-632AC
79.	Two Port Network for h & g Parameters for AC with Digital Meters	SE-632ACDM
80.	Wheatstone Bridge	SE-633
81.	Kelvin's Bridge (Double bridge)	SE-634
82.	Maxwell's Bridge	SE-635
83.	Hay's Bridge	SE-636
84.	Owen's Bridge	SE-637
85.	Desauty's Bridge	SE-638
86.	Anderson's Bridge	SE-639
87.	Schering Bridge	SE-640
88.	Wein Bridge	SE-641
89.	Capacitor Charging & Discharging	SE-642
90.	Capacitor Charging & Discharging with 2 Digital Meters	SE-642DM
91.	Step Response of RC First order Circuit	SE-643
92.	Step Response of RLC Second order Circuit	SE-644
93.	Capacitance of Series Combinations	SE-645
94.	Capacitance of Parallel Combinations	SE-646
95.	Pie to T Network Converter	SE-647
96.	T to Pie Network Converter	SE-648
97.	Pie to T and T to Pie Network Converter	SE-649
98.	Constant K-Type Low Pass Filter	SE-650
99.	Constant K-Type High Pass Filter	SE-651
100.	Constant K-Type Band Pass Filter	SE-652
101.	Constant K-Type Band Reject Pass Filter	SE-653
102.	Constant M-Type Low Pass Filter	SE-654
103.	Constant M-Type High Pass Filter	SE-655
104.	Constant M-Type Band Pass Filter	SE-656
105.	Constant M-Type Band Reject Pass Filter	SE-657
106.	Constant K-Type Passive Filter Trainer	SE-658

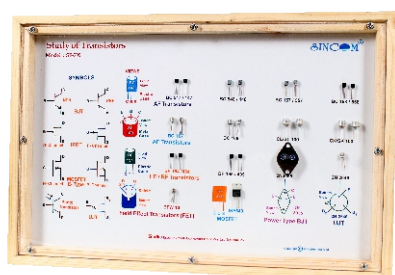
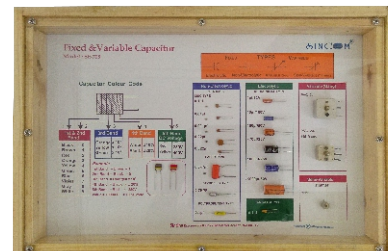
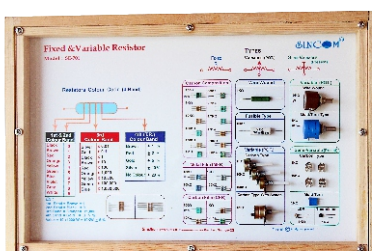
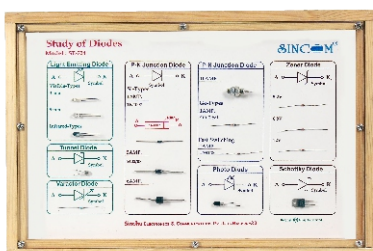
S.N.	Particulars	Model
107.	Constant M-Type Passive Filter Trainer	SE-659
108.	RC Low, High & Band Pass Filter	SE-660
109.	Resistance of Series Combinations	SE-661
110.	Resistance of Parallel Combinations	SE-662
111.	Resistance of Series & Parallel Combinations	SE-663
112.	Capacitance of Series & Parallel Combinations	SE-664
113.	Step Response of RL First order Circuit	SE-665
114.	Thevenin, Norton & Superposition Theorem	SE-666
115.	Thevenin, Norton & Superposition Theorem with 2 Digital Meters	SE-666DM
116.	Step Response of RC & RL First order Circuit	SE-667
117.	Step Response of RL, RC & RLC Circuit	SE-668
118.	Lissajous Pattern Trainer	SE-669
119.	Study of Transformer	SE-670
120.	Twin - T Network	SE-671
121.	Network Reduction Techniques Trainer with 2 Digital Meters	SE-672DM
122.	Measurement of Medium Resistance with 2 Digital Meters	SE-673DM
123.	Mesh & Nodal Analysis for DC with 2 Digital Meters	SE-674
124.	Mesh & Nodal Analysis for AC with 2 Digital Meters	SE-675
125.	Symmetrical T Attenuator	SE-676
126.	Symmetrical Pi Attenuator	SE-677
127.	Mega Ohm Bridge	SE-678
128.	Phase Difference of RL, RC, RLC Series Circuit	SE-679



7. ELECTRONICS COMPONENTS DISPLAY BOARD (Series 700)

S.N.	Particulars	Model
1.	Display Board of Different Fixed & Variable Resistor	SE-701
2.	Display Board of Different Variable Resistor	SE-702
3.	Display Board of Fixed & Variable Capacitors	SE-703
4.	Display Board of Diodes	SE-704
5.	Display Board of Transistor	SE-705
6.	Display Board of SCR, DIAC, TRIAC, UJT	SE-706
7.	Display Board of Wires & Cables	SE-707
8.	Display Board of Connector	SE-708
9.	Display Board of Display	SE-709
10.	Display Board of Switches	SE-710
11.	Display Board of Relays	SE-711
12.	Display Board of Inductor	SE-712
13.	Display Board of Transformers	SE-713
14.	Display Board of Transformers & Coil	SE-714
15.	Display Board of loud Speakers	SE-715
16.	Display Board of loud Speakers & Microphone	SE-716
17.	Display Board of Analog ICS	SE-717
18.	Display Board of Digital ICS (TTL & CMOS)	SE-718
19.	Display Board of Discrete ICs (Analog, Digital)	SE-719
20.	Soldering & Desoldering Practice Trainer	SE-720
21.	SMD Discrete Components Board	SE-721
22.	Discrete Components Board	SE-722
23.	Components Testing Board	SE-723

700



8. ELECTRONICS MEASURING INSTRUMENTS DEMONSTRATOR (Series 800)

S.N.	Particulars	Model
1.	Analog Multimeter Demonstrator (To Study Measurement of Current, Resistance, AC,DC Voltage)	SE-801
2.	Digital Multimeter-1 (To Study Measurement of AC, DC Voltage)	SE-802
3.	Digital Multimeter-2 (To Study Measurement of Resistance)	SE-803
4.	Digital Multimeter-3 (To Study Measurement of AC,DC Currents)	SE-804
5.	Digital Frequency Counter Demonstrator	SE-805
6.	Signal Generator Demonstrator	SE-806
7.	IC 7107 as DPM Demonstrator	SE-807
8.	Multirange DC Voltmeter using PMMC meter	SE-808
9.	Multirange DC Ammeter using PMMC meter	SE-809
10.	Multirange AC Voltmeter using PMMC meter	SE-810
11.	Multirange AC Ammeter using PMMC meter	SE-811
12.	Digital Multimeter Demonstrator	SE-812

800



9. ADVANCE TRAINERS (Series 900)

S.N.	Particulars	Model
Section A : Advance Communication Trainers		
1.	Colour TV Trainer, 21" Flat Picture Tube with Faults Creating Facility	SA-901
2.	Digital Satellite Receiver DTH Trainer with Dish Antenna (KU Band)	SA-903
3.	EPABX Demonstrator with P&T Interface facility, with Four Telephone sets & Faults Creating Facility (3X8 System)	SA-904
4.	Cordless Telephone Demonstrator	SA-905
5.	CD Player (DVD/VCD/ACD/MP3) Demonstrator with 3 Faults Creating Facility	SA-906
6.	Hi-Fi Public Address Amplifier Trainer with 5 Faults Creating Facility	SA-907
7.	Hi-Fi Stereo Amplifier Trainer with 5 Faults Creating Facility	SA-908
8.	Telephone Demonstrator with Faults Creating Facility	SA-909
9.	Antenna Simulator Trainer	SA-911
10.	AM Transmitter & Receiver Trainer (wireless link)	SA-912
11.	FM Transmitter & Receiver Trainer (wireless link)	SA-913
12.	FM Modulation & Demodulation (All types) Trainer	SA-914
13.	FM Modulation & Demodulation (All types) Trainer with Signal Generator	SA-914G
14.	AM/FM/PM Modulation & Demodulation Trainer	SA-915
15.	AM/FM/PM Modulation & Demodulation Trainer with Signal Generator	SA-915G
16.	PAM/PWM/PPM Modulation & Demodulation Trainer	SA-916
17.	PAM/PWM/PPM Modulation & Demodulation Trainer with Signal Generator	SA-916G
18.	ASK/FSK/PSK Modulation & Demodulation Trainer	SA-917
19.	ASK/FSK/PSK Modulation & Demodulation Trainer with Signal Generator	SA-917G
20.	Optical Communication Trainer with Digital Link	SA-918
21.	Optical Communication Trainer with Analog Link	SA-919
22.	Optical Communication Trainer with Analog & Digital Link	SA-920
23.	MODEM Demonstrator	SA-921
24.	TDM PAM (2 Channel) Modulation & Demodulation Trainer	SA-922
25.	TDM PCM Modulation (Transmitter) Trainer	SA-923
26.	TDM PCM Demodulation (Receiver) Trainer	SA-924
27.	Line Coding & Decoding Trainer	SA-925
28.	Data Formatting & Carrier Modulation (Transmitter) Trainer	SA-926
29.	Data Reformatting & Carrier Demodulation (Receiver) Trainer	SA-927
30.	Data Communication using LASER diode Trainer	SA-928
31.	Mobile Phone Communication Demonstrator	SA-929
32.	GSM Mobile Communication Demonstrator	SA-930
33.	LCD TV Trainer with Faults creating facility	SA-931
34.	LED HD TV Trainer with Faults creating facility (Digital TV)	SA-932
35.	AM/FM Radio Receiver with (5) Faults Creating Facility	SA-934
36.	Advance Fiber Optics Trainer	SA-935
37.	4G Mobile Phone Demonstrator	SA-936
38.	Audio System Demonstrator	SA-937
39.	RF Wireless Communication Trainer	SA-941
40.	Multi Channel Wireless Communication Trainer	SA-942
41.	RF Application based Trainer	SA-943
42.	GPS Trainer	SA-944
43.	Bluetooth Trainer	SA-945
44.	DSB/SSB AM Transmitter	SA-946
45.	DSB/SSB AM Receiver	SA-947
46.	ASK/FSK Modulation & Demodulation Trainer with Signal Generator	SA-949
47.	TDM PCM (4 Channel) Modulation & Demodulation Trainer	SA-950
48.	Audio Amplifier (Quad/Dual) using IC STA540 Trainer	SA-951
49.	RF Simplex and Duplex Communication Link Trainer	SA-952

Section B : General Trainers

1.	DC Power Supply Demonstrator with faults creating facility (Single 0-30V/2A)	SB-901
2.	Semiconductor Devices Characteristics Trainer with Digital Meters	SB-902

S.N.	Particulars	Model
	[Diodes (Semiconductor, Zener), Transistor (BJT,UJT,JFT,MOSFET), Photo Diode ,Photo Transistor, LDR,SCR,DIAC,TRIAC]	
3.	Characteristics of All Diodes (Semiconductor PN Junction, Zener, Schottky, Light Emitting LED , Varactor Diode)	SB-903
4.	Characteristics of All Diodes with Digital Meters (Semiconductor PN Junction, Zener, Schottky, Light Emitting LED , Varactor Diode)	SB-903DM
5.	Transistor Characteristics Trainer (BJT,UJT,JFET,MOSFET,IGBT)	SB-904
6.	Transistor Characteristics Trainer with Digital Meters (BJT,UJT,JFET,MOSFET,IGBT)	SB-904DM
7.	Photo conducting Devices Trainer	SB-905
8.	Photo conducting Devices Trainer with Digital Meters	SB-905DM
9.	SCR Gate Triggering Trainer (Turn-On Methods)	SB-906
10.	SCR Force Commutation (Turn-OFF Methods)Trainer All Types	SB-907
11.	UPS Demonstrator Offline 500 VA with 12V Battery	Sb-908
12.	Inverter Demonstrator 500 VA with 12V Battery	SB-909
13.	AC SERVO Controlled Voltage Stabilizer Demonstrator	SB-910
14.	Power Electronics Trainer	SB-911
15.	Op-Amp IC 741 Characteristics (Parameter) Trainer	SB-912
16.	Op-Amp IC 741 Application Trainer	SB-913
17.	Op-Amp IC 741 Characteristics & Application Trainer	SB-914
18.	OP-AMP as Active Filter trainer all types	SB-915
19.	Linear IC Trainer	SB-916
20.	Timer IC 555 Trainer	SB-917
21.	Multivibrators using BJT	SB-918
22.	Multivibrators using BJT and OP-AMP	SB-919
23.	Multivibrators using IC 555	SB-920
24.	Multivibrators using BJT and Digital IC	SB-921
25.	Multivibrator Trainer using BJT, IC 555 & Op-Amp	SB-922
26.	Oscillators using Transistor Trainer (All types)	SB-923
27.	Oscillators & Multivibrator Trainer using BJT	SB-924
28.	Opto Electronics Components characteristics Trainer	SB-925
29.	Discrete Components Trainer	SB-926
30.	Analog Multimeter Demonstrator	SB-927
31.	Digital Multimeter Demonstrator (Part 1, 2 & 3)	SB-928
32.	Network Theorem Trainer (Thevenin, Norton, Millman, Superposition, Reciprocity, Maximum Power Transfer Theorem)	SB-929
33.	Camera and CCTV (Closed Circuit TV) Trainer	SB-930
34.	Bridges Trainer	SB-934
35.	Network Circuit Trainer	SB-935
36.	Components Testing Board	SB-936
37.	Transistor Application Trainer	SB-938
38.	SCR,MOSFET, BJT Characteristics trainer with Digital meters	SE-940DM
39.	Home Electrical Wiring Trainer	SB-941
40.	Quartz Crystal Oscillator Trainer	SB-943
41.	BJT Amplifier Trainer (Single Stage CE,CB,CC, Two stage RC and Direct Coupled, Class A,B,C, Class AB Push Pull, Complementary Symmetry Push Pull Amplifier)	SB-944

Section C : Digital Electronics Trainers

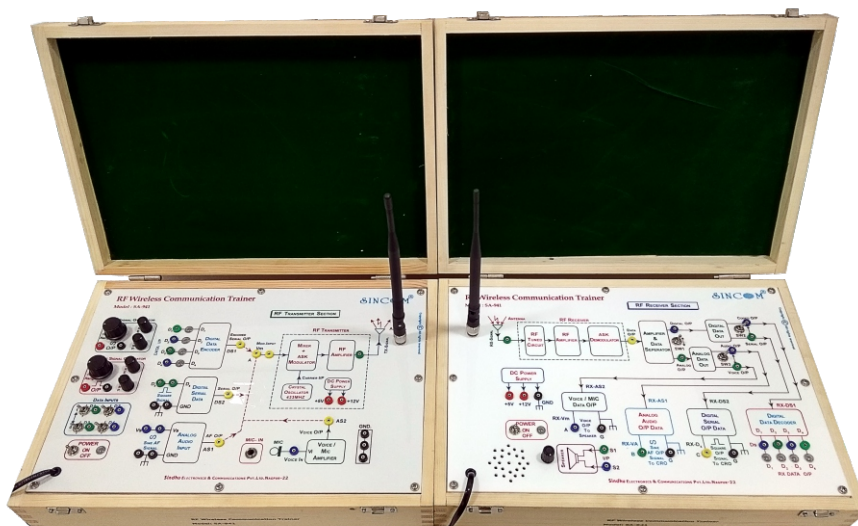
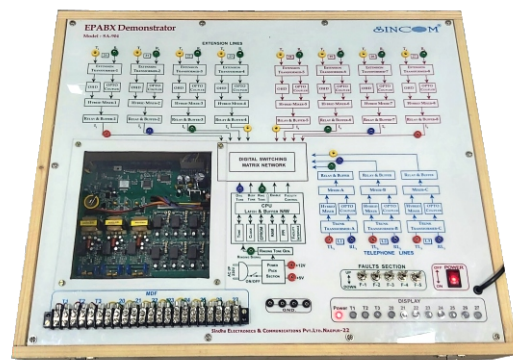
1.	Logic Gate Trainer using IC	SC-901
2.	Basic Digital IC Trainer (15 Experiments)	SC-902
3.	Digital IC Trainer (25 Experiments)	SC-903
4.	Advance Digital IC Trainer (50 Experiments)	SC-904
5.	Digital Counter Trainer	SC-905
6.	Digital Code Converter trainer	SC-906
7.	Flip-Flop Trainer	SC-907
8.	Digital Counter & Shift register Trainer	SC-908
9.	Shift Register Trainer	SC-909
10.	Multiplexer & Demultiplexer Trainer	SC-910

S.N. Particulars

Model

Section D : Breadboard Trainers

- | | | |
|----|--|--------|
| 1. | Bread Board Trainer | SD-901 |
| 2. | General Purpose Board Trainer | SD-902 |
| 3. | Analog and Digital Circuit Lab Trainer | SD-903 |
| 4. | Digital Circuit Lab Trainer | SD-904 |
| 5. | Analog Circuit Lab Trainer | SD-905 |
| 6. | Project Development Platform-Basic | SD-906 |
| 7. | Project Development Platform-Advance | SD-907 |
| 8. | Basic Bread Board Trainer | SD-908 |



10. INSTRUMENTATION & CONTROL SYSTEM (Series 1000)

S.N.	Particulars	Model
1.	Characteristics of RTD	SE-1001
2.	Characteristics of Thermocouple	SE-1002
3.	Characteristics of Thermister	SE-1003
4.	Characteristics of RTD & Thermister	SE-1004
5.	Temperature Measurement using RTD	SE-1005
6.	Temperature Measurement using Thermister	SE-1006
7.	Temperature Measurement using Thermocouple	SE-1007
8.	Temperature ON/OFF Controller using RTD/ Thermocouple (any one)	SE-1008
9.	Transducer Trainer (RTD, Thermister, Thermocouple)	SE-1009
10.	Calibration of Temperature Measuring System	SE-1010
11.	Characteristics of Temperature Sensor IC LM 355	SE-1011
12.	Characteristics of NTC Bridge	SE-1012
13.	Op-Amp as Non Inverting Amplifier with Thermister feedback	SE-1013
14.	Diode as Thermistor Device	SE-1014
15.	Transistor as Temperature Sensor	SE-1015
16.	Measurement of Strain using Strain Gauge with Digital Display	SE-1016
17.	Measurement of Load using Load Cell with Digital Display	SE-1017
18.	Measurement of Pressure using Transducer with Digital Display)	SE-1018
19.	Measurement of Linear Displacement using LVDT with Digital Display	SE-1019
20.	Open Loop Control System	SE-1020
21.	Closed Loop Control System	SE-1021
22.	AC Position Control System	SE-1022
23.	DC Position Control System	SE-1023
24.	Proportional (P) Control System	SE-1024
25.	Proportional Integral (PI) Control System	SE-1025
26.	Proportional Integral Derivates (PID) Control System	SE-1026
27.	P,PI,PID Control System- Temperature control	SE-1027
28.	Characteristic of Potentiometer & its loading Effect	SE-1028
29.	Potentiometer as an Error Detector	SE-1029
30.	Linear & Logarithmic Potentiometer Characteristic	SE-1030
31.	Speed measurement using Optical Transducer	SE-1031
32.	Voltage Divider Network using LDR	SE-1032
33.	Flow measurement using Rota meter, Orifice, Venturi tube setup	SE-1033
34.	Humidity Measurement Demonstrator	SE-1034
35.	Pressure measurement using Burdon Tube, Pressure Gauge setup	SE-1035
36.	Capacitive Displacement Transducer	SE-1036
37.	Sensors Trainer-1	SE-1037
38.	Characteristics of RTD & Thermocouple	SE-1038
39.	Fire Alarm Trainer	SE-1039
40.	Temperature ON/OFF Controller using Thermister	SE-1040
41.	Sensors Trainer-2	SE-1041
42.	Microphone Sound Measurement Demonstrator	SE-1042
43.	Temperature ON/OFF Controller using Thermocouple	SE-1043
44.	Temperature Measurement using RTD & Thermocouple	SE-1044
45.	PH Meter Demonstrator	SE-1045
46.	Angular Displacement Measurement Using Potentiometer	SE-1046
47.	Linear Displacement Measurement Using Potentiometer	SE-1047
48.	Water Level Measurement & controller Demonstrator with faults creating facility	SE-1048
49.	Electronics Weighing Machine Demonstrator with faults creating facility	SE-1049



11. RENEWABLE SOLAR ENERGY LAB (Series 1100)

S.N.	Particulars	Model
1.	Solar Cell Characteristics	SE-1101
2.	Solar Cell Characteristics with Digital Meters	SE-1101DM
3.	Solar Energy Applications Demonstrator	SE-1102
4.	Study of Solar Panel	SE-1103
5.	Solar PV Inverter Demonstrator (Off Grid) 500VA with Battery	SE-1104
6.	Characteristics of Series & Parallel combinations of solar cells	SE-1105DM
7.	To Study characteristics of Mono Crystalline and Poly Crystalline Solar Panel	SE-1106DM
8.	Solar based Automatic Battery Charger Demonstrator with 12V Battery	SE-1107DM
9.	Solar PV Plant Demonstrator (On Grid & Off Grid) complete setup 1KW	SE-1108
10.	Solar PV Charge controller Demonstrator	SE-1109

1100



12. POWER SUPPLY (Series 3000)

S.N.	Particulars	Model
1.	Single DC Power Supply 0-30V/0-2A with 2 Digital Meters	S-3021
2.	Dual DC Power Supply 30-0-30V/0-2A with 4 Digital Meters	S-3022
3.	Multi DC Power Supply 0-30V/0-2A, 0- ±15V/1A, 0-5V/1A with 4 Digital Meters (Triple Power Supply)	S-3023
4.	Fixed DC Power Supply +5V / 1A	SF-3001
5.	Fixed DC Power Supply +12V / 1A	SF-3002
6.	Fixed DC Power Supply ± 12V / 1A	SF-3003
7.	Multi Fixed Power Supply +5V , ± 12V / 1A	SF-3004
8.	Variable Single DC Power Supply 0-12V/ 1A	SF-3005
9.	Variable Dual DC Power Supply 0- ± 12 V / 1A	SF-3006
10.	Variable Single DC Power Supply 0-15V/ 1A	SF-3007
11.	Variable Dual DC Power Supply 0- ± 15 V / 1A	SF-3008
12.	Fixed DC Power Supply +15V / 1A	SF-3009
13.	Fixed DC Power Supply ± 15V / 1A	SF-3010



13. DIGITAL V & I Meters (Series-DVI, DMVI)

S.N.	Particulars	Model
A	DIGITAL V I METER (DVI)	
1.	DVI-01 : Range V-20V, I-20mA DC	DVI-01
2.	DVI-02 : Range V-20V, I-200mA DC	DVI-02
3.	DVI-03 : Range V-2V, I-2mA DC	DVI-03
4.	DVI-04 : Range V-2V, I-20mA DC	DVI-04
5.	DVI-05 : Range V-200V, I-200mA DC	DVI-05
B	DIGITAL MULTI V I METER (DMVI)	
1.	DMVI-01 : Range V1-2V, I1-2mA, V2-20V, I2-20mA, DC	DMVI-01
2.	DMVI-02 : Range V1-2V, I1-2mA, V2-20V, I2-200mA DC	DMVI-02
3.	DMVI-03 : Range V1-20V, I1-20mA, V2-20V, I2-200mA DC	DMVI-03
4.	DMVI-04 : Range V1-20V, I1-20mA, V2-200V, I2-200mA DC	DMVI-04
5.	DMVI-05 : Range V1-2V, I1-20mA, V2-200V, I2-200mA DC	DMVI-05



Please ASK For Product Specification Catalogue

Design and Manufactured in INDIA by


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