



# National Institute of Technology Delhi

## राष्ट्रीय प्रौद्योगिकी संस्थान दिल्ली

### Vision

Create an educational environment to prepare the students to meet the challenges of the modern electronics and communication industry through state of art technical knowledge and innovative approaches beneficial to society.

### Mission

- To promote teaching and learning by engaging in innovative research and by offering state-of-the-art undergraduate, postgraduate, and doctoral programs.
- To cultivate an entrepreneurial environment and industry interaction, leading to the emergence of creators, innovators, and leaders.
- To promote co-curricular and extra-curricular activities for the overall personality development of the students.
- Building of responsible citizens through awareness and acceptance of ethical values.

### DEPARTMENT OF ELECTRONICS AND COMMUNICATION ENGINEERING

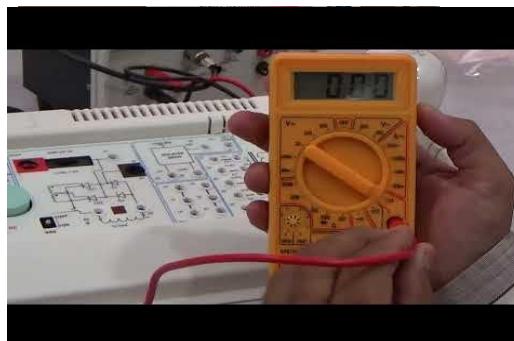
### इलेक्ट्रॉनिक्स एवं संचार अभियांत्रिकी विभाग



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# संचार प्रणाली लैब | Communication system Lab





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## संचार प्रणाली लैब | Communication system Lab

**COMMUNICATION SYSTEM TRAINER** (Model : XPO-COM)  
Fiber Optic Communication Trainer



Communication system trainer Kit (XPO-COM)



Digital storage oscilloscope (DSO)



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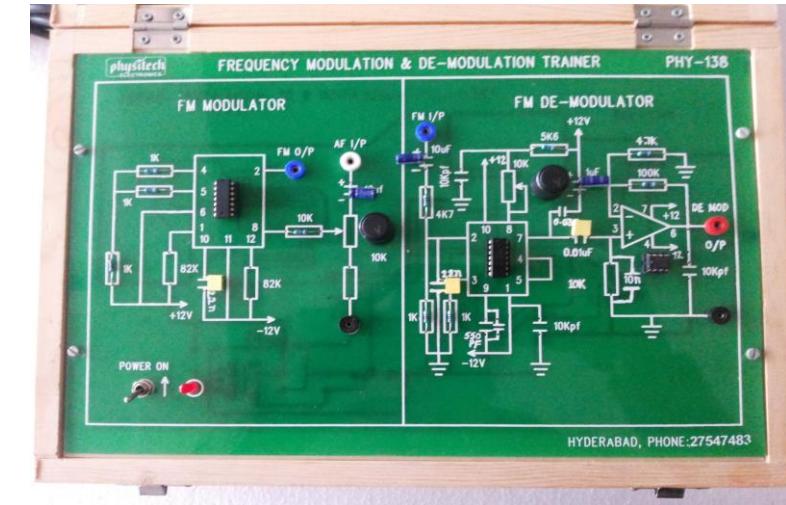
### संचार प्रणाली लैब | Communication system Lab



DSB MODEM



Handheld Spectrum Analyzer



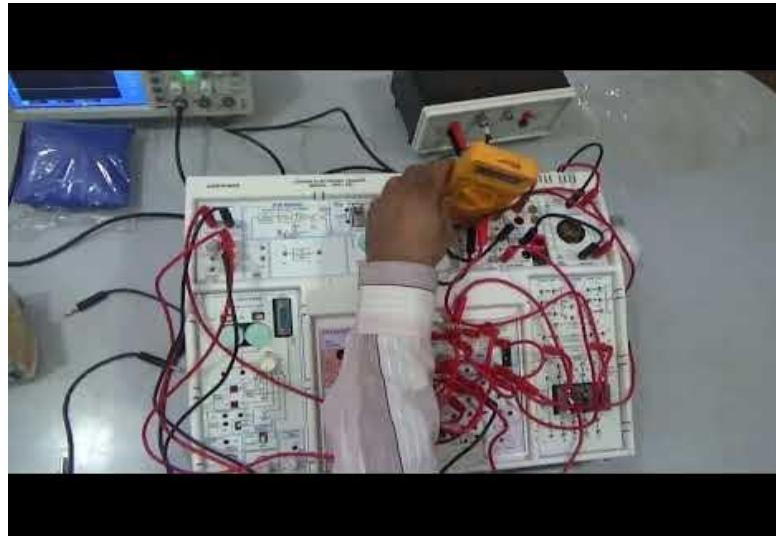
Frequency modulation  
demodulation kit



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छात्र निर्देशित पर्यवेक्षण के तहत प्रयोग करने के लिए प्रयोगशाला में मौजूद विभिन्न उपकरणों का उपयोग करते हुए।

Students using the various devices and equipment present in the laboratory to perform the experiments under guided supervision.



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### संचार प्रणाली लैब | Communication system Lab

#### List of Instruments/ Equipment/ Software

#### Hardware

S. No.	Item Description	Qty	Model/ Version	Make
1	Desktop Computer System (PC), Core i7, RAM- 8GB, HDD- 1TB HDD	5	406 G1 MT Business PC, Monitor- V192	HP
2	DSB/SSB AM Transmitter Trainer	2	ST8200	Salicon
3	DSB/SSB AM Receiver Trainer	2	ST8201	Salicon
4	Analog Signal Sampling & Reconstruction Trainer	2	CT-ASRK	Vinytcs Peripherals
5	FM Modulation & Demodulation Expt. Panel,	6	CM 7	Trinity Microsystems
6	Communication Systems Trainer	12	XPO-COM	Trinity Microsystems
7	Data Formatting/ Reformatting Expt. Panel	6	CM 8	Trinity Microsystems
8	Single (1) channel Sampling & Reconstruction, 4 Channel TDM/PAM & PPM, PWM, PFM Expt. Panel	6	CM 2	Trinity Microsystems

#### Hardware

S. No.	Item Description	Qty	Model/ Version	Make
9	16 QAM Modulation/ Demodulation Expt. Module	6	CM 12	Trinity Microsystems
10	Two (2) Channel pulse Code [TDM/ PCM] Modulation/ Demodulation with frame & bit Error Detection & synchronization & Correction Expt. Panel	4	CM 4	Trinity Microsystems
11	4 Channel CDMA Modulation/ Demodulation Expt. Panel	4	CM 13	Trinity Microsystems
12	Delta, adaptive delta, sigma delta modulation and demodulation Experiment Panel	6	CM 5	Trinity Microsystems
13	Baseband SDR Communication Kit (PSK, DPSK, QPSK, DQPSK, 16QAM, 8QAM, 8PSK, MSK, DMSK Differential Mode & non-differential mode	4	CM20	Trinity Microsystems
14	AM modulation & demodulation Expt. Panel	6	CM 6	Trinity Microsystems



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#### Hardware

S. No.	Item Description	Qty	Model/ Version	Make
15	Data formatting and carrier Modulation Trainer (Transmitter)	2	CT-DCCM	Vinytis Peripherals
16	Data reformatting and carrier De-Modulation Trainer (Receiver)	2	CT-DRCM	Vinytis Peripherals
17	DM, ADM and Signal Delta Mod/ Demod. Trainer	2	Scientech 2803	Scientech Technologies
18	Digital Storage Oscilloscope Infinivision, 200Mhz, 2GSa/s	10	DSOX2024 A	Keysight Technologies
19	Digital storage oscilloscope, 70mhz, 2 channel,	5	DSOX1202 A	Keysight Technologies
20	Data format/ Reformat conditioning Reprogrammable development tool	2	NA	Advance Technologies
21	Error Detection & Correction Cyclic Codes	2	Scientech 2120	Scientech Technologies
22	Error Detection & Correction Reprogrammable Development tool	2	NA	Advance Technologies
23	Function Generator 10Mhz (Single Channel)	7	Scientech 4061	Scientech Technologies

#### Hardware

S. No.	Item Description	Qty	Model/ Version	Make
24	Function Generator (Single channel Arbitrary) 25Mhz/ 250MS/s	4	AFG3021C	Tektronix
25	Arbitrary Function Generators, 20MhzDual channel	7	EDU33212 A	Keysight Technologies
26	Frequency Modulation & Demodulation Trainer	2	Salicon ST8203	Salicon Nano Technology
27	Frequency Division Multiplexing/ De-Multiplexing Trainer	2	Vinytis CT-FDM	Vinytis Peripherals
28	Universal IC Tester	1	ET-UIC	Excel Technologies
29	Digital Multimeter	10	616	Rishabh
30	Power Supply (DC Multiple Power Supply)	5	Scientech 4077	Scientech Technologies
31	Programmable DC Power Supply	5	E3632A	Agilent
32	Triple Output DC Power supply	11	2231A-30-3	Keithley
33	PCM, DPCM, CVSD Modulator & Demodulator Trainer	2	Scientech 2802	Scientech Technologies



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S. No.	Item Description	Qty	Model/ Version	Make
33	PCM, DPCM, CVSD Modulator & Demodulator Trainer	2	Scientech 2802	Scientech Technologies
34	PAM, PWM, PPM & Line Coding Trainer	2	Scientech 2801	Scientech Technologies
35	QAM Modulation/ Demodulation Reprogrammable Development Kit	2	NA	Advance Technologies
36	Spectrum analyser, Handheld 100 Khz to 7 Ghz	1	H9342C	Agilent Technologies
37	TDM-PAM Modulation & Demodulation Trainer	2	Scientech-2152	Scientech Technologies
38	LCR Meter, Handheld, Make- Keysight	10	U1733C	Keysight Technologies
39	Universal Communication Reprogrammable Development Kit	2	Model-1045	Advance Technologies
40	WSN Development tool kit	2	Model 1052-VR04	Advance Technologies



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धन्यवाद | THANK YOU

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Department of Electronics and Communication Engineering

