

## Manipal University Jaipur School of Electrical, Electronics & Communication (SEEC) Engineering **Department of Electronics & Communication Engineering**

## **COMMUNICATION LAB**

## Lab and Lab Equipment Details

Name of the Laboratory	COMMUNICATION LAB
Lab Descriptions	This lab provides an overview of the basic Communication based experiments where students would learn how transmitter and receiver system works. The student would have an opportunity to make projects sample as well.
Lab Resources	1. SCIENTECH CDMA TRAINER, ST 2115
	2. RIGOL 50 MHz TWO CAHNNEL DSO DIGITAL STORAGE OSCILLOSCOPE, 1052 E
	3. SCIENTECH DIFFERENTATIAL PULSE CODE MODULATION/DEMODULATION TRAINER ST 2113
	<ul><li>4. CADDO 5MHz WITH 40 MHz FREQ COUNTER CADDO 4063 A</li><li>5. SCIENTECH ISDN TRAINING SYSTEM/B-LINK 4 SIMULATOR</li></ul>
	6. SCIENTECH MSK MODULATION / DEMODULATIONTRAINER, ST 2116
	7. SCIENTECH 16 QAM MODULATION TRAINER, ST 2136
	8. SCIENTECH 16 QAM/DQAM MODULATION TRAINER, ST2136
	<b>9.</b> RIGOL 1.5 GHz SPECTRUM ANALYZER WITH TRACKING GENERATOR, DSA 815
	10. RIGOL -2GHz SPECTRUM ANALYZER, DSA 1020
	11. CADDO 30MHz OSCILLOSCOPE, 803
	12. APLAB DIGITAL MULTIMETER 3(3/4) DIGIT, VC 97
	13. SCIENTECH DSB/SSB AM TRANSMITTER, 2201
	14. SCIENTECH DSB/SSB AM RECEIVER, 2202 15. SCIENTECH PCM, DPCM, CVSD MODULATOR &DEMODULATOR, 2802
	<b>16.</b> SCIENTECH ASK, FSK, BPSK, DBPSK MODULATOR & DEMODULATOR, 2807
	17. SCIENTECH DIGITAL STORAGE OSCILLOSCOPE 70 MHz, 1GS/s, 2.5K RECORD LENGTH 2 CHANNEL, COLOUR DISPLAY, 402
	18. SCIENTECH OPTICAL FIBER COMMUNICATION, 2502
	19. SCIENTECH OPTICAL POWER METER, 2551
	20. SCIENTECH LASER FIBER OPTIC TRAINER TRANSMITTER ,2506
	21. SCIENTECH LASER FIBER OPTIC TRAINER RECEIVER, 2506
	22. NVIS LED RADIATION PATTERN TRAINER, NV 6014 23. SCIENTECH FREQUENCY MODULATION & DEMODULATION
	TRAINER, 2203
	24. SCIENTECH DIGITAL STORAGE OSCILLOSCOPE 100 MHz, 25. 1GSa/s, 2.5K RECORD LENGTH 2 CHANNEL, COLOUR DISPLAY, 403

<b>26.</b> SCIENTECH TRANSMISSION LINE TRAINER, 2266
27. SALICON ANTENNA TRAINER, ST 8261
28. CADDO LCR METER (RANGE 100 Hz to 1 KHz), NB 9302
<b>29.</b> MICROWAVE BENCH (KLYSTRON BASED) - X BAND
FREQUENCY
<b>30.</b> MICROWAVE BENCH (GUNN BASED) - X BAND FREQUENCY
<b>31.</b> MICROWAVE BENCH (HORN ANTENNA BASED) - X BAND
FREQUENCY
<b>32.</b> REQUIRED MICROWAVE COMPONENTS – X BAND FREQUENCY
33. HP COMPUTER SYSTEM (Intel core i3-2120, 4 GB RAM)
<b>34.</b> AMITEC SOFTWARE DEFINED RADIO SDR-04, 0.4 – 4 GHz
<b>35.</b> LENOVO COMPUTERS (Intel core i5-7400, 3.8 GB RAM & One PC
with 16 GB RAM)
<b>36.</b> X-BAND MICROWAVE POWER METER
37. RFL-AMS-A, ADVANCED 4 GHz MOTORIZED ANTENNA TRAINER
SYSTEM
38. CST Studio Suite Research Base Pack 2021 (Software)
39. Wireless InSite (Software)