DIGITAL COMMUNICATION LABORATORY

OBJECTIVES:

❖ To study the signal sampling by determining the sampling rates for baseband signals and reconstruct the signal.

❖ To study source coding techniques using Huffman and shannon Fano coding procedures.

❖ To study the various steps involved in generating and degenerating different pulse modulation techniques.

❖ To study various modulation techniques using simulation process

❖ To study the generation and demodulation of PSK, QPSK, ASK and FSK.

OUTCOMES:

❖ Study and comprehend the basics of Communication system and different Digital Modulation Systems.

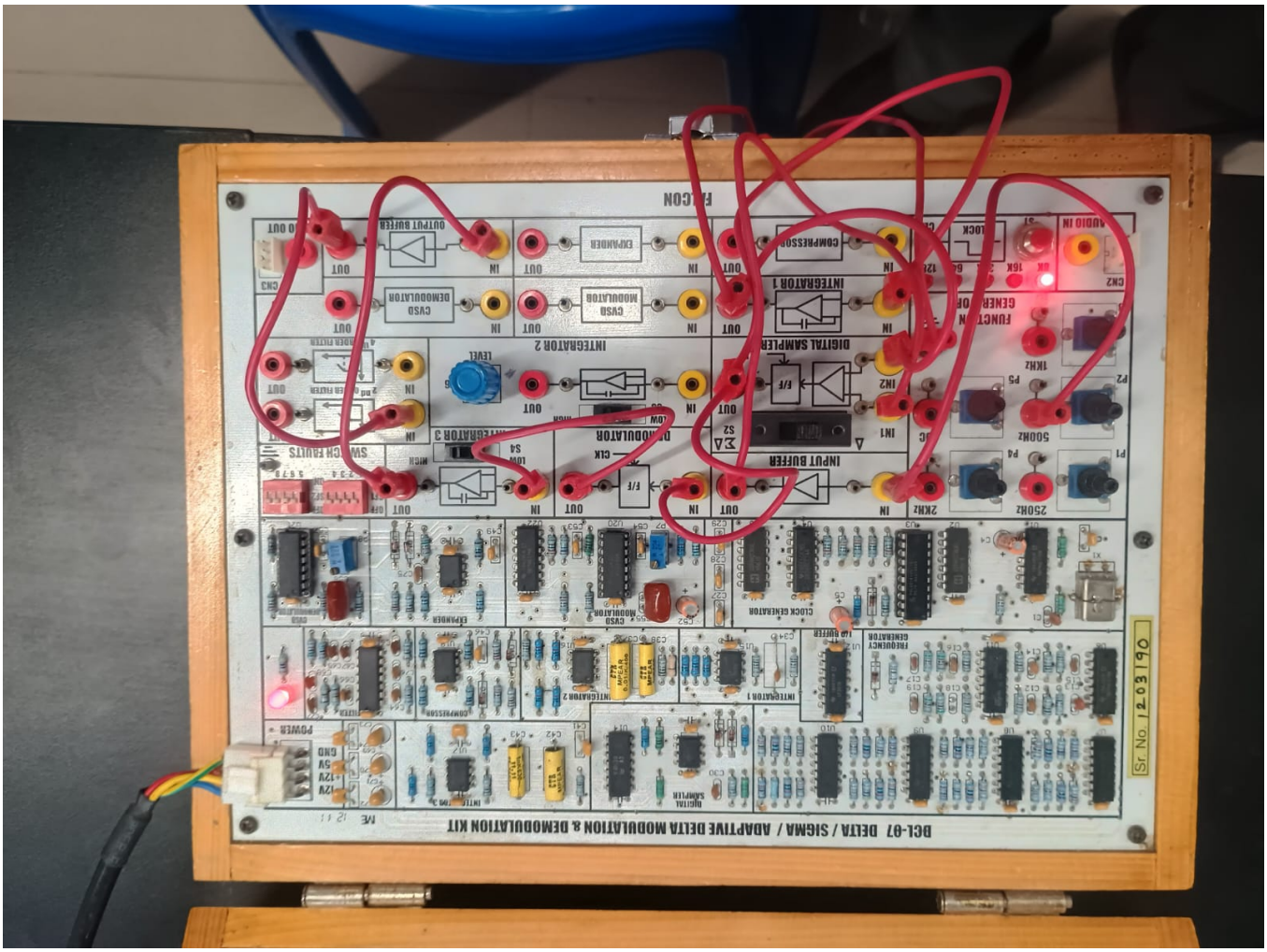
❖ Analyze the operation of each device in various types of modulation systems.

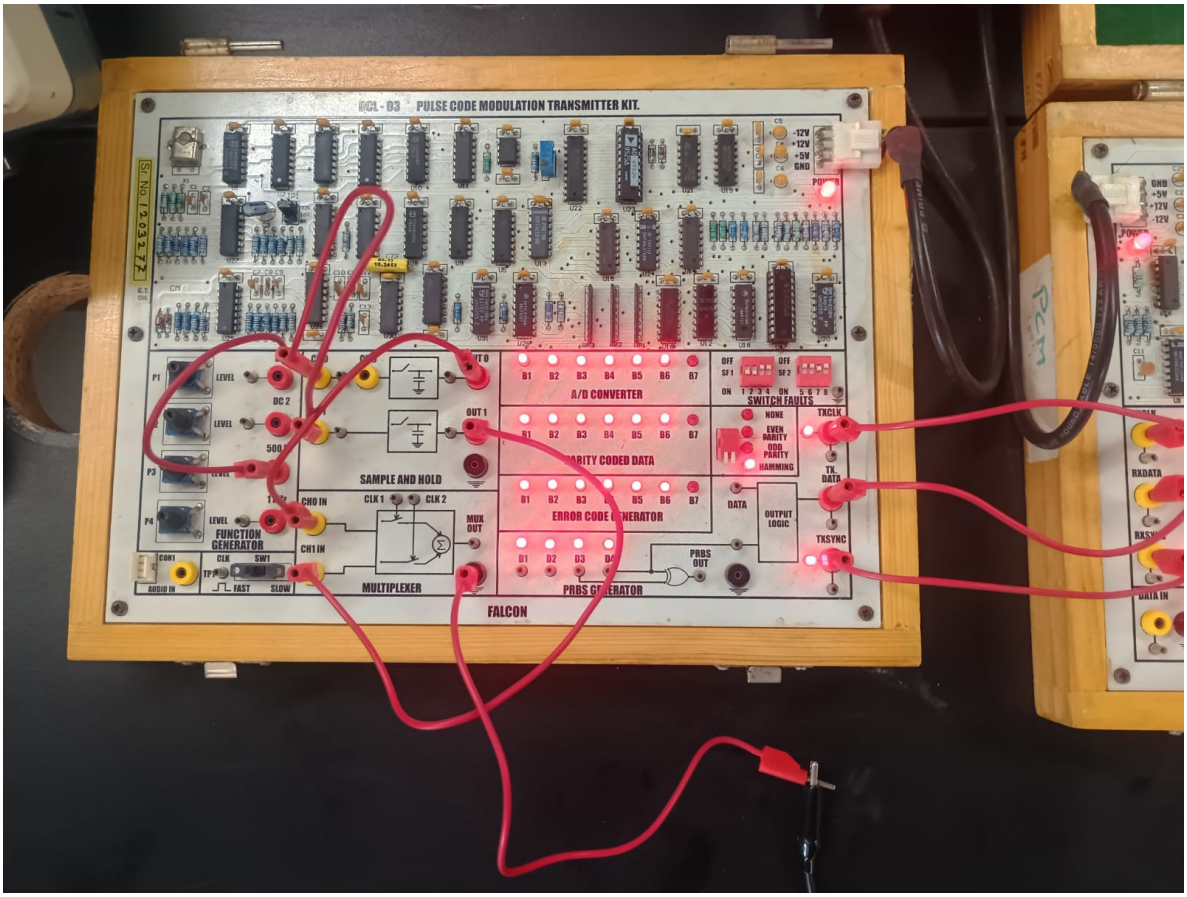
❖ Design and conduct experiments of different Digital modulation systems, in order to interpret the results.

List of Equipments:

1. Digital Storage Oscilloscopes - 10
2. TDM trainer Kits - 2
3. DM/ADM trainer kits - 2
4. Line Coding Kits - 2
5. Sampling Kits - 2
6. PAM/PWM/PPM trainer kits - 2

7. ASK/PSK/ FSK trainer kits - 2
8. PCM trainer Kits - 2
9. QPSK/DPSK trainer Kits - 2




DCL - 03 PULSE CODE MODULATION TRANSMITTER KIT.
Sr.No 1203177
-12V
+12V
+5V
GND
POWER
A/D CONVERTER
SWITCH FAULTS
NONE
EVEN PARITY
ODD PARITY
HAMMING
TXCLK
TX DATA
TXSYNC
SAMPLE AND HOLD
OUT 1
FUNCTION GENERATOR
LEVEL
FREQ
CH0 IN
CH1 IN
CLK 1
CLK 2
MUX OUT
MULTIPLEXER
ERROR CODE GENERATOR
DATA
OUTPUT LOGIC
PRBS OUT
PRBS GENERATOR
FAST
SLOW
AUDIO IN
FALCON
RXDATA
DATA IN