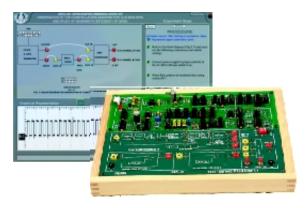
DIGITAL COMMUNICATION

ADCL - 03 QPSK AND DQPSK DEMODULATION KIT



It works with model ADCL 02. It takes the modulated signal from ADCL 02 as an input & demodulates the same.

FEATURES:

- Clock recovery through PLL
- Dibit decoding
- Symbol decoder
- QPSK and DQPSK demodulation
- Bandwidth Efficiency
- Constellation Diagram
- Switch faults

TECHNICAL SPECIFICATIONS:

Receiver Clock: Generated by Phase-Lock Loop.

Data Format (decoding): Dibit Pair (I & Q), Differential Decoding of

I & Q Bits

Carrier Demodulation: QPSK, DQPSK.

Switch Faults: 4 Switch Faults are provided on board to study different

effects on circuit.

Interconnection: 2 mm Banana Socket.

Test Points: 24 Test points are provided to observe various intermediate

signals.

Power Supply: GND, +5V, +12V, -12V.

LIST OF EXPERIMENTS:

- Principles of Advance Digital demodulation techniques.
- Observation of Constellation diagram.
- Study of Bandwidth Efficiency of QPSK & DQPSK.
- · Quadrature Phase Shift Keying demodulation technique.
- Differential Quadrature Phase Shift Keying demodulation technique.
- Effect of Switch Faults.
- Observation of noise effect in Constellation diagram (Optional)

ACCESSORIES:

Uses accessories supplied with ADCL-02 Kit

