Experiment 8

OBJECTIVE:

The objective of this experiment is to study a 650 nm fiber optic digital link. In this experiment, we will study a relationship between the input signal and the received signal.

PROCEDURE:

1 Connect the power supply to the board.

2 Ensure that all switch faults are OFF.

3 Make the following connections.

a. Connect the function generator 1 KHz square wave output to the

emitter 1's input.

b. Connect the fiber optic cable between the emitter's output and detector's input.

c. Connect detector 1's output to the comparator 1's input.

d. Connect comparator 1's output to AC amplifier 1's input.

4 On the board switch emitter 1's driver to digital mode.

5 Switch ON the power.

6 Monitor both the inputs to comparator 1 (tp 13 and tp 14). Slowly adjust the

comparator bias. Reset until DC level on the input (tp 13) lies midway

between the high and low level of the signal on positive input (tp 14).

7 Observe the input to emitter (tp 5) with output from AC amplifier 1 (tp 28)

and note that the two signals are same.



OBSERVATION

Input Voltage (V)	Output Voltage (V)	Time (ms)

Result